



# COMMUNICATIONS

GREENLEE COMMUNICATIONS OFFERS A COMPLETE LINE OF INNOVATIVE AND INDUSTRY-LEADING TEST & MEASUREMENT SOLUTIONS FOR THE COMMUNICATION SERVICE PROVIDER INDUSTRY.



## Contents

Multi-Network Test Analyzers	280
Wireless Test Solution	281
Cable Maintenance Test Set	282
Cable & Service Testing	286
Wire & Cable Identification	293
Structured Wiring Testers	305
Buried Facility Location And Marking	310
Fiber Optic Test Equipment	315
Fiber Optic Hand Tools	337
Fiber Optic Kits	339
Communications Kits	340
Hand Tools	352
HDMI Tools	382



# DataScout™ 10G

**NEW PRODUCT**



DS10G-HW-B2

**SPECIFICATIONS**

<b>Display &amp; Input</b>	7" WVGA LCD touch screen 800x600 resolution
<b>Weight (Varies by configuration)</b>	0.91 kg (2.0 lbs) minimum 1.36 kg (3.0 lbs) maximum
<b>Dimensions</b>	10 x 6.5 x 2.2 inches (WxHxD) 254 x 165 x 56 millimeters (WxHxD)

**ENVIRONMENTAL**

<b>Operating Temperature</b>	Operating Temperature: 10°C to 55°C/14°F to 131°F
<b>Operating Humidity:</b>	0% to 93% RH non-condensing
<b>Storage Temperature:</b>	-20°C to 70°C -4°F to 158°F
<b>Battery Type:</b>	Li Ion battery pack
<b>Run Time:</b>	2-8 hours (varies by test mode)
<b>External Power:</b>	Mains: 110-240VAC, 50-60Hz with adaptors
<b>Enclosure:</b>	Shell: Rugged 1.5mm extruded aluminum Boot: Rubber with Wi-Fi® antenna storage slot Kickstand: Powder coated steel

**CONFIGURATION OPTIONS**

CAT. NO.	DESCRIPTION
<b>TABLET CONTROLLER</b>	
<b>N</b> DS10G-HW-B1	Base Controller Without Datacom Interface
<b>N</b> DS10G-HW-B2	Base Controller With Datacom Interface
<b>TEST INTERFACES</b>	
<b>N</b> DS10-HW-WIFI	Wi-Fi®
<b>N</b> DS10-HW-ETH	Dual 10/100/1000T/X & 10G Ethernet
<b>N</b> DS10-HW-PDH1	Dual DS1
<b>N</b> DS10-HW-PDH2	DS3 & Dual DS1
<b>N</b> DS10-HW-P	ISDN-PRI
<b>N</b> DS10-HW-DDS	Digital Data Services (DDS)
<b>N</b> DS10-HW-T	Transmission Impairment Measurement System (TIMS)

Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

\*As compared to competitive network analyzer model  
Subject to change without notice.

**CUSTOMIZABLE FOR ANY WORKGROUP**

**FASTER TIME TO RESULTS**

- Ready to test in 25 seconds
- Unique DS0 (TIMS) to 10G Ethernet solution
- Test multiple services simultaneously

**SIMPLE TO USE, FAST TO LEARN**

- Touch screen tablet design
- Portrait and landscape modes
- Intuitive test configuration
- Exportable results

**RUGGED & RELIABLE**

- Plug & stay - No modules to lose!
- Replaces up to 8 handhelds\*
- Light yet sturdy aluminum housing
- Protective non-slip boot with kickstand

**DESIGNED FOR:**

- Service Providers
- Utilities
- Mobility
- Enterprise

**Test Kits Include:**

- DataScout 10G analyzer
- Universal charger with adapter blades

**SOFTWARE OPTIONS**

CAT. NO.	DESCRIPTION
<b>ETHERNET TEST OPTIONS</b>	
DS10G-SW-201	Adds dual port 1Gb Ethernet testing
DS10G-SW-110	Activates single 10G test interface
DS10G-SW-210	Adds dual port 10Gb Ethernet testing
<b>DS1 TEST OPTIONS</b>	
DST-SW-DT1	Adds dual port T1 testing
DST-SW-N1	Adds T1 CSU/NIU emulation
DST-SW-V	Adds DS0 voice analysis
DST-SW-E	Adds Euro/Asian ISDN-PRI support
DST-SW-X	Adds DS0 drop, insert & bypass
DST-SW-DCOM	Adds DATACOM DTE/DCE interface testing
DST-SW-E1	Adds E1/T1 On-The-Fly testing
<b>DS3 TEST OPTIONS</b>	
DST-SW-H3	Adds DS3 thru-mode testing
DST-SW-D1D	Adds DS1 drop from DS3 signal
DST-SW-NX	Adds DS3 CSU/NIU emulation
<b>TIMS TEST OPTIONS</b>	
DST-SW-PRO4	Adds 4-button frequency program
DST-SW-4	Adds 4-WIRE 100/135Ω testing
DST-SW-EM	Adds E&M TYPE I-V signaling, trunk, PBX and Tie Line testing
DST-SW-DG	Adds measurement of dropouts, hits, amplitude, and phase jitter
DST-SW-TON	Adds transmit of warble ID tone

## DataScout™ 10G Product Specifications

### PRODUCTIVITY APPLICATIONS

- Chrome web browser
- Google maps
- Email, notes & contacts
- PDF viewer
- Onboard user manual & videos
- Remote control/upload via LAN

### 802.11 WIRELESS VALIDATION

- Tests for proper 802.11 b,g,n configuration
- Performs channel scan
- Graphical frequency/channel/power display
- Remote control via Wi-Fi

### ETHERNET VALIDATION

- Dual 10/100/1000T/X SFP Ethernet ports
- 10 Gigabit Ethernet SFP+
- BERT
- Optical power measurement
- PING & Traceroute
- RFC-2544 with quick test validation
- Loopback, monitor and thru modes
- Easy to read graphical reports

### DS3 TESTING

- Automatic self test on connection
- STS-1 signal detection
- Simultaneously test Dual T1 and DS3

### DS1 TESTING

- Dual T1/E1 testing
- PRI-ISDN NT/TE emulation
- T1 to Ethernet Bridging
- DS0 Voice & Data Testing
- CSU/NIU Emulation Mode
- VT100 emulation
- Frame Relay option

### SIGNALING (T1MS/DS0) TESTING

- Comprehensive VF test suite
- T1MS 2/4 wire plus wideband
- CO/PBX emulation
- Perfect replacement for Am5, CXR-704, HP4935A

### 4 WIRE DDS TESTING

- CSU/DSU emulation
- 56K primary/secondary modes
- 64K clear channel mode
- Real-time received byte display
- Monitor received signal level

### DATACOM TESTING

- Sync/Async & DTE/DCE modes
- V.35, RS232, RS449, RS530, X21

### INTELLIGENT TIMING VERIFICATION

- Verifies network timing systems
- Combines oscilloscope, T1 test and switch box
- Composite clock/pulse analysis
- Eliminates need for expensive storage oscilloscope
- Test 10 T1/E1 circuits in seconds





# MULTI-NETWORK TEST ANALYZERS

## DataScout™ 1G

NEW  
PRODUCT



DS1G-BAS

### FASTER TIME TO RESULTS

- Ready to test in 15 seconds
- Efficient SLA verification
- Results can be exported for easy sharing

### REDUCE TIME TO REPAIR

- All-in-one analyzer that is simple to use and fast to learn, enabling technicians to quickly determine and resolve network issues, regardless of the source

### NO MODULES REQUIRED

- Eliminates the need for multiple test modules
- Combines seven different physical layer test protocols into one complete handheld testing solution, saving time and money

### DESIGNED FOR THE TECHNICIAN

- Ruggedized for demanding environments
- Ergonomically designed to be the lightest and smallest on the market
- Long battery run time provides extended field testing

### Test Kits Include:

- DataScout 1G analyzer
- Universal charger with adapter blades
- Padded storage case
- Stylus
- USB adapter
- Wi-Fi® Antenna

### SPECIFICATIONS

<b>Interfaces</b>	Management: LAN 10/100 Base-T USB: Mini-USB with adapter Headset: Mini USB connector ear bud
<b>Wi-Fi</b>	802.11 b/g/n
<b>Display &amp; Input</b>	3.5" TFT Touch Screen LCD
<b>Weight</b>	1.65 lbs (0.75 kg) without battery 2.2 lbs (1 kg) with battery
<b>Dimensions</b>	3.94 x 8.27 x 1.66 inches (WxHxD) 100 x 210 x 42 millimeters (WxHxD)

### ENVIRONMENTAL

<b>Operating Temperature</b>	0°C to 50°C
<b>Operating Humidity</b>	5% to 90% non condensing
<b>Storage</b>	-10°C to 70°C
<b>Battery</b>	Type: Li Ion battery pack, 7.4V, 4800mAh Run Time: 7-10 hours typical (varies by test mode)
<b>External Power</b>	Mains: 110-240 VAC, 50-60 Hz
<b>Enclosure</b>	Ruggedized ABS with rubber shell

### CONFIGURATION OPTIONS

CAT. NO.	DESCRIPTION
DS1G-BAS	Ethernet Analyzer
DS1G-PDH1	DS1 analyzer (T1 or E1)
DS1G-PDH2	DS1/DS3 analyzer (T3/T1 or E3/E1)

### SOFTWARE OPTIONS

CAT. NO.	DESCRIPTION
DS1G-SW-BAS	Adds single stream Ethernet tests to DS1G-PDH1 or PDH2
DS1G-SW-ADV	Adds multiple stream Ethernet and Y.1564 tests
DS1G-SW-WIFI	Adds Wi-Fi® analysis
DS1G-SW-VOIP	Adds VoIP analysis
DS1G-SW-IPTV	Adds IPTV analysis
DS1G-SW-E1	Adds E1 to T1 analyzer
DS1G-SW-T1	Adds T1 to E1 analyzer
DS1G-SW-DCOM	Adds DATACOM testing
DS1G-SW-CODIR	Adds Co-Directional testing
DS1G-SW-E3	Adds E3 testing to T3 analyzer
DS1G-SW-T3	Adds T3 testing to E3 analyzer
DS1G-SW-C37	IEEE C37.94 Teleprotection analysis





# WIRELESS TEST SOLUTION

## AirScout™



# AirScout™

ENABLING Wi-Fi READINESS

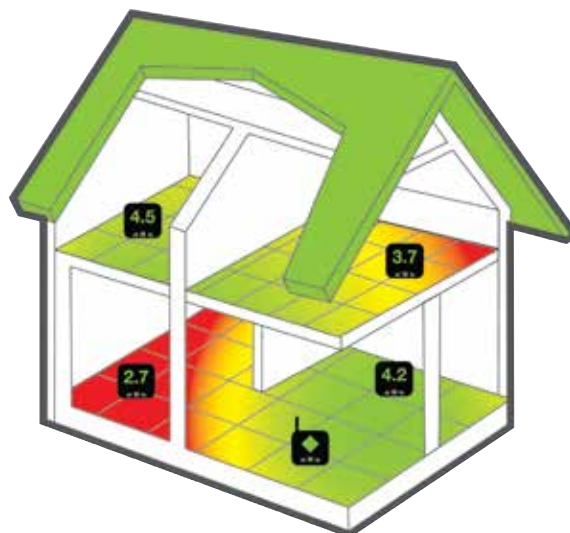
- › *The innovative Wi-Fi test solution*
- › *Enables whole home or small business Wi-Fi® readiness testing in minutes*
- › *Determines real “Quality of Experience” in multiple locations simultaneously*

CAT. NO.	DESCRIPTION
<b>N</b> ASK302	Two Client Solution in Carry Case
<b>N</b> ASK306	Six Client Solution in Carry Case
<b>A</b> ASM300	Individual Master Controller
<b>A</b> ASC300	Individual Client

### SPECIFICATIONS

<b>ASM Controller</b>	Height	1.81" (46.2 mm)
	Width	5.83" (147.6 mm)
	Depth	5.79" (146.8 mm)
	Weight	332 g (11.7 oz)
<b>ASC Client</b>	Height	1.46" (36.83 mm)
	Width	4.88" (124.46 mm)
	Depth	4.88" (124.46 mm)
	Weight	247 g (8.71 oz)
<b>ASK306</b>	Height	14.6" (370 mm)
	Width	11.8" (300 mm)
	Depth	6.69" (170 mm)
	Weight	11.7 lbs (187.2 oz)
<b>Environment</b>	Operating Temperature	0 to +55 °C / 0 to +131 °F
	Storage Temperature	-20 to +65 °C / -4 to +149 °F
	Operating Humidity	20-80% RH non condensing
	Storage Humidity	10-90% RH non condensing
<b>Compliance</b>	FCC	
	Canada Regulatory Requirements (ICES-003)	
	CE Compliance	

- Industry leading Application benchmark testing
- All 802.11 types benchmarked
- Validation testing over time increasing accuracy
- Determines, throughout the home in one survey:
  - Signal strength
  - Network congestion
  - Signal to noise ratio
  - Real throughput rates
  - Application performance in each location
- Up to 30 Clients supported
- Results recorded locally and in a cloud database for future reference



Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

# CABLE MAINTENANCE TEST SET

## Sidekick® Plus Copper and DSL Test Set

**NEW  
PRODUCT**



1155-5005

- **Saves time** – Easy-to-use mode selection dial and operation - minimizes training needs and saves time on the job
- **Versatile** – Combines your copper qualification needs with DSL sync and service testing in one test set
- **Fully loaded** – The Sidekick® Plus xDSL comes complete with all you need to perform tests on the copper networks that support DSL services
- **No modules needed** – Advanced cable diagnosis and troubleshooting in a single test set

### Applications

Helps technicians diagnose and troubleshoot problems with twisted pair cable install, qualify, and maintain DSL services

### Features

#### Bonded Modem With xDSL:

- Pair bonding
- ADSL2+/VDSL2+
- Vectoring
- Broadcom BCM63168
- Automated test scripts
- USB export/import of test results/profiles
- 35MHz Wideband Noise Spectrum Analysis
- 4.4MHz Loss Measurement Test
- 35MHz Impulse Noise Step
- TDR with auto bridgetap detection (zero dead zone)

#### ADSL/VDSL Modem Sync And Service Tests:

- DSL Showtime
- Bits per Tone Graph
- Signal-to-Noise Ratio Graph
- HLOG Graph
- Error Counter
- Upper Layer Testing: Ping, Trace-route, HTTP, FTP

#### Standard Features:

- Advanced Dual Trace Pulse TDR (Zero Dead Zone)
- Resistive Fault Locator (Detects up to 20M $\Omega$ )
- 1G $\Omega$  Leakage Test (Insulation Resistance)
- Longitudinal Balance Test
- Ground Resistance Test
- Stress Test
- AC/DC Voltage
- Resistance
- Open Meter
- Loop Current
- Circuit Loss
- Tracing Tone Generator
- Reference Tone

CAT. NO.	UPC NO.	DESCRIPTION
1155-5001	01316	Sidekick Plus Kit LCC
1155-5003	01324	Sidekick Plus Kit SCC
1155-5005	01463	Kit, Sk Plus, Impulse Noise, Step TDR
1155-5009	01317	Sidekick Plus With Wideband
1155-5010	01318	Sidekick Plus With Wideband & Adsl/Vdsl Sync LCC
1155-5011	02275	Sidekick Plus With Wideband & Adsl/Vdsl Sync SCC
1155-5012	04197	Sidekick Plus Pair Bonded Modem - Fully Featured
1155-5013	03838	Sidekick Plus Pair Bonded Modem - Fully Featured SCC

## Sidekick® Plus ADSL Far-End-Device

**NEW PRODUCT**



1155-5001

For use with the Sidekick® Plus as a complete ADSL testing solution

### Applications:

- Helps technicians diagnose and troubleshoot problems with twisted pairs at the far end of the cable
- Install, qualify, and maintain ADSL services

### Benefits:

- Helps qualify pairs for ADSL service with ease
- Reduces testing time and increases technician productivity

### Features:

- K-Test – Far-End-Device straps the pair under test
- TDR – Far-End-Device can alternately short and open the pair to verify the end-of-line
- Noise – Far-End-Device provides a line termination
- Loss – Far-End-Device provides single or multiple reference tones
- Longitudinal Balance – Far-End-Device provides an IEEE 455-1985 Longitudinal Balanced Termination
- Autotest – The Sidekick Plus manages the operation of the Far-End-Device during the test sequence
- Short Pair – Verifies loop length
- Short Pair to Ground – Determines pair resistive balance
- Remote activation via Sidekick® Plus
- Ability to connect and disconnect Central Office and Customer Premise equipment
- Supports Second Pair Testing
- Generates tones for pair ID and pair tracing
- Capability to generate tones over a range of frequencies from POTS to ADSL

### Kit Includes:

- Sidekick® ADSL Far-End Device Unit
- RJ45 to Telco clip leads
- Canvas carry case

### \*For use with the Sidekick® Plus Models

1155-5009	Sidekick® Plus with Wideband
1155-5010	Sidekick® Plus with Wideband & ADSL/VDSL Sync LCC
1155-5011	Sidekick® Plus with Wideband & ADSL/VDSL Sync SCC
1155-5012	Sidekick® Plus Bonded Modem - Fully Featured
1155-5013	Sidekick® Plus Bonded Modem - Fully Featured

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> 1157-5001	03958	Sidekick® FED Kit



**Sidekick® T&ND**

1144-5000



- Easy-to-read digital LCD display
- Internal Dialer for making Transmission Test connections
- Autotest – performs 22 individual tests at the touch of a button
- Determines the stressed noise susceptibility of dry and working pairs
- Measures AC/DC Volts, Leakage, resistance, and loop current
- Performs circuit loss, circuit noise (metallic noise), and power influence tests
- Built-in open meter
- Locates up to 4 load coils
- Single set up for Tip-Ring, Tip-Ground, and Ring-Ground tests
- Field replaceable test leads
- On-screen display of “LOW BATTERY” when batteries are near failure.

**SPECIFICATIONS**

<b>Weight</b>	2 lbs.	<b>Opens</b>	0 to 60 kft.
<b>Dimensions</b>	10.75" X 4.25" X 2.5"	<b>Loop Current</b>	0 to 100 mA
<b>AC Volts</b>	300 Vrms max.	<b>Load Coil</b>	up to 4
<b>DC Volts</b>	± 300 Volts max.	<b>Circuit Loss</b>	+1 to -15 dB
<b>Resistance</b>	1 Megohm max.	<b>Power Influence</b>	40 to 100 dBmC
<b>Leakage</b>	100 Megohm max.	<b>Circuit Noise</b>	0 to 75 dBmC
<b>Stress</b>	0 to 82 dBmC	<b>Power</b>	Four AA Batteries

CAT. NO.	UPC NO.	DESCRIPTION
1144-5000	60853	Sidekick T&ND Test Set
R 1134-1002S	60752	Case

**Sidekick® T&N**

1137-5002



- Five transmission and noise tests
- Determines the stressed noise susceptibility of dry and working pairs
- Measures resistance, AC/DC volts, and capacitive kick
- Provides tone for twisted pair or crossed conductor identification
- Single setup for testing Tip-Ring, Tip-Ground, and Ring-Ground
- Minimal drying effect in all ranges
- Field replaceable leads
- Softcase with adjustable strand hook
- Low battery indicator light

**SPECIFICATIONS**

<b>Dimensions</b>	10.75" x 4.25" x 2.5"	<b>Stress Test</b>	0 to 82 dBmC
<b>Weight</b>	2 lbs.	<b>Loop Current</b>	0 to 100 mA
<b>Resistance</b>	Rx1: Reads 0 to 2000 Ω Rx1K: Reads 0 to 2 MΩ	<b>Circuit Noise</b>	0 to 75 dBmC
<b>Leakage</b>	Rx10K: Reads 0 to 20 MΩ	<b>Circuit Loss</b>	-15 to +1 dB
<b>DC Voltage</b>	0 to 300 volts DC	<b>Power Influence</b>	50 to 100 dBmC
<b>AC Voltage</b>	0 to 300 Vrms	<b>Operating Temp.</b>	-4°F to +140°F
		<b>Power</b>	Four AA batteries

CAT. NO.	UPC NO.	DESCRIPTION
1137-5002	60526	Sidekick T&N
R 1131-0202	60751	Test Leads
R 1134-1002S	60752	Case

## Sidekick® 7B



1134-5029

- Determines the stressed noise susceptibility of dry and working pairs
- Measures resistance, AC/DC volts, and capacitive kick
- Provides tone for twisted pair or crossed conductor identification
- Single setup for testing Tip-Ring, Tip-Ground, and Ring-Ground
- Minimal drying effect in all ranges
- Field replaceable leads
- Softcase with adjustable strand hook
- Low battery indicator light

### SPECIFICATIONS

<b>Dimensions</b>	10.75" x 4.25" x 2.5"
<b>Weight</b>	2 lbs.
<b>Resistance</b>	Rx1: Reads 0 to 2000 Ω; Rx1K: Reads 0 to 2 MΩ
<b>Leakage</b>	Rx10K: Reads 0 to 20 MΩ
<b>DC Voltage</b>	0 to 100 Volts DC
<b>AC Voltage</b>	0 to 200 Vrms
<b>Stress Test</b>	0 to 82 dBmC

CAT. NO.	UPC NO.	DESCRIPTION
1134-5029	60525	Sidekick 7B
<b>R</b> 1134-1002S	60752	Case
<b>R</b> 1131-0202	60751	Test Leads

## Sidekick® V.O.C.



1143-5000

- Identifies defective inside wire and jacks
- Measures resistance, AC/DC volts, quasi square wave, and pair balance
- Identifies shorts, opens, crosses and grounds
- Replaces the need for other meters
- Provides tone for twisted pair or crossed conductor identification
- Single set-up for testing Tip-Ring, Tip-Ground, and Ring-Ground with ground connection
- Field replaceable leads
- Softcase with adjustable hook
- Low battery indicator light

### SPECIFICATIONS

<b>Dimensions</b>	10.75 x 4.25 x 2.5 inches
<b>Weight</b>	2 lbs.
<b>Resistance</b>	Rx1: Reads 0 to 2000 Ω Rx1K: Reads 0 to 2 Megohms
<b>Leakage</b>	Rx10K: Reads 0 to 20 Megohms
<b>DC Voltage</b>	0 to 100 Volts DC
<b>AC Voltage</b>	0 to 200 Vrms
<b>Stress Test</b>	0 to 82 dBmC
<b>Operating Temp.</b>	-4°F to +140°F
<b>Power</b>	Four AA batteries

CAT. NO.	UPC NO.	DESCRIPTION
1143-5000	60527	Sidekick V.O.C.
<b>R</b> 1134-1002S	60752	Case

# CABLE & SERVICE TESTING

## TM-700 Tele-Mate™ Telephone Test Set



TM-700

- Complete telephone set with ringer
- Phone-to-phone intercom, compatible with other SmartIntercom™ devices
- Modular or alligator clip connection
- Amplified loudspeaker line monitor
- Headset or handset operation
- Tone and pulse dialing
- Large 10-location speed dialing memory
- Multi-memory redial
- DTMF digit detection and measurement
- Tone output mode
- Caller ID with name display
- Call waiting Caller ID
- Missed call indication
- DSL compatible, high impedance monitor and filters
- Glow-in-the-dark keypad
- Line voltage and current display
- High voltage detect and lockout
- High current detect and lockout
- Uses 2 AA/LR6 batteries (included)
- Quick release belt-clip



A PRODUCT VIDEO IS AVAILABLE, SCAN THIS QR CODE OR VISIT:

[www.youtube.com/GreenleeDEMO](http://www.youtube.com/GreenleeDEMO)

### SPECIFICATIONS

#### Technical Specifications

Length:	9.25" (235 mm)
Width:	2.5" (64 mm)
Height:	3.25" (83 mm)

CAT NO.	UPC NO.	DESCRIPTION	QTY.
TM-700	00984	TM-700 Tele-Mate™ TELEPHONE TEST SET	1

## TM-500 Tele-Mate™ Telephone Test Set



TM-500

- Luminescent (glow-in-the-dark) keypad
- Can be used safely on a DSL enabled line
- High Impedance Monitor for monitoring line without disrupting existing traffic
- Over voltage and over current protection
- Tone and Pulse dialing for versatility on old and new phone lines
- Polarity test with LED indicator
- 32 digit last number redial and pause
- 10 number speed dial
- Adjustable volume control plus mute
- Pause
- Flash to generate a timed break recall
- Line powered, no battery needed
- Headset (included) for hands free operation
- RJ11 socket
- Quick release belt-clip

### SPECIFICATIONS

#### Technical Specifications

Length:	9.25" (235 mm)
Width:	2.5" (64 mm)
Height:	3.25" (83 mm)

CAT NO.	UPC NO.	DESCRIPTION	QTY.
TM-500	00486	Telephone Test Set W/ ABN "Bed-Of-Nails" Croc Clips (POP)	1
TM-500T	00494	Telephone Test Set W/ ABN "Bed-Of-Nails" Croc Clips (Boxed)	1
TM-500i	00643	Telephone Test Set W/ Small Croc Clips (Boxed)	1



## Nautilus Range Telephone Test Sets



PE961

- Waterproof tested to an IEC IP67 rating, these test sets are so impervious to water they can actually withstand submersion, though they actually float
- The PE961 features our DigAlert™ over-voltage alarm and lock-out function to reduce the risk of damaging or knocking out digital service lines
- Built-in DSL Filter
- Ten-number speed dial memory (32 digits each)
- Last number redial
- Precise hook flash
- Microphone mute
- Audible and visual mode indicators
- Polarity test in any mode
- Unique quick-release belt clip
- Premium cord set with bed-of-nails and piercing pin clips
- Luminescent Keymat

CAT. NO.	UPC NO.	DESCRIPTION
PE930	60487	Telephone Test Set
PE945	60489	Test Set with Two-Way Hands Free
PE961	60511	Test Set with Two-Way Hands Free and DigAlert
<b>A</b> PE901	60492	Ground Start Cord Set
<b>R</b> PE902	60493	Cord Set

FEATURE	PE930	PE945	PE961
Monitor safe for data	✓	✓	✓
Adjustable Ringer	✓	✓	✓
Waterproof Design	✓	✓	✓
Loud Speaker Listening		✓	✓
Two-Way Hands Free		✓	✓
DigAlert™ Data Lock-out		✓	✓
ADSL Compatible	✓	✓	✓

### ToneRanger



- Direct buried fault location, it gives an exact location to the fault.
- Locates open shield and open bond faults
- Locates twisted-pair resistance faults in aerial, underground, and direct buried cable
- Locates splits, opens and bridge taps
- Uses low voltage and does not damage cable, circuit cards, C.O. or subscriber equipment
- Sends Pair ID tone through wet pulp and saves service outage time on small count section throws
- Locates open shields and shield to earth faults
- Does not interfere with DSL, IPTV or digital services on adjacent lines
- NEW easy user interface

CAT. NO.	UPC NO.	DESCRIPTION
10101-50000	12734	TF1A Kit, ToneRanger Aerial
10101-51000	20206	TF1ABL Kit, ToneRanger Aerial and Buried
10101-51100	20202	TF1AP Kit, ToneRanger Aerial with Pair ID
10101-51200	12733	TF1AB Kit, ToneRanger Aerial with Buried Wand
10101-51300	12732	TF1AL Kit, ToneRanger Aerial with Layup Stick
10101-51400	52019	TF1ABLP Kit, ToneRanger with Aerial, Buried & Pair ID
52042471	-	Transmitter Test Cable

### Throwmaster® Paragon



- Used by construction cable splicers all around the world
- Transfer telephone/broadband services during normal working hours.
- Does not interrupt important customers
- Simple to follow interface and process for successful transfer of circuits
- LED's on the cords aid in telling the user in the cut, transfer and splice
- Compatible with T-1, HDSL, HDSL-2, HDSL-4, ADSL and other services less than 10Mb/s
- Each step is automatically tested and verifies the circuit is complete at the end of the transfer

CAT. NO.	UPC NO.	DESCRIPTION
0529-0001	52901	Throwmaster® Paragon 519 Kit

## 1155 Fault Loop Simulator



1155-7001

- Simulates 8 faults that can be used individually, or in a combination:
  - Cross battery
  - Resistive 5 kohm load to ground
  - Resistive 500 ohm short
  - Two balanced bridge taps
  - 60 ohm series resistance fault
  - 60 Hz Power Influence
  - High frequency noise
- 1910 foot cable length
- Battery operated
- Ruggedized case
- Convenient Test Lead connections.
- Three access locations in the span for custom faults
- Train users on real twisted-pair faults
- Test multiple test set functions such as RFL, TDR, Power Influence, Stress, Leakage, Resistance, impulse noise and others
- Verify results from the field in a controlled environment
- Demonstrates how noise increases with pair imbalances
- Show differences between shorts, bridge taps, series faults and opens with a TDR

CAT. NO.	UPC NO.	DESCRIPTION
1155-7001	57691	Test Set

## 4-6-8 Modular Adapters



PA1902

- Nylon-reinforced ABS plastic body.
- Easy-to-read wire layout.
- Removable/replaceable patch cord.
- Inline adapters.
- Snagless plugs.
- Belt clip.
- Notched copper contacts keep alligator clips attached during testing.

CAT. NO.	DESCRIPTION
PA1902	RJ45 Modular Adapter (8-way)
PA1903	RJ11 Modular Adapter (6-way)



**TurTEL® Modular Adapters/Polarity Tester**



46050

- Use with tone generators, test sets and other test devices to troubleshoot and isolate problems with telephone circuits
- Two jacks allow in-line testing without service interruption
- The TurTEL 8 has two eight-position, eight-wire jacks
- Simple, push button operation to check polarity and power
- Reduced chance of shorting adjacent alligator clips due to unique shape
- Test contacts are perforated to provide sure grip for alligator clips or use of probes
- Patch cord included
- Heavy-duty stainless steel belt clip

CAT. NO.	UPC NO.	DESCRIPTION
46050	46050	TurTEL 8 Modular Adapter

**TelScout® TS90**



TS90INTL

- Two Pair Test Capability
- One-Step Setup
- Automatic Instrument Control Mode
- 45,000' (15 km) Fault Location Capability
- Splash and Drip Proof
- Single-Button Zoom Function
- Pair Comparison Mode
- Splits/Crosstalk Mode
- Intermittent Fault Location
- Measures Distance to Fault in Feet, Meters, or Time
- Configurable for Any Cable Type and Vp (0.300 to 1.000)
- Accurate (±3 ft. at 10,000 ft.)
- On-line Tutorials
- Large Backlit Display

**SPECIFICATIONS**

**Environmental** Temperature –  
 Operating: 32° F to 77°F (0° C to +45° C).  
 Non-operating: 12° F to 92°F (-20° C to +60° C). Humidity – 95% RH, non-condensing.  
 EMI Emissions –  
 EN55011 class A.  
 EN60555-2.

**Power** Battery Operation –  
 Battery Type: Six AA Alkaline.  
 Operating Time: >4.5 hrs. with backlight off.  
 Battery Saver:  
 Selectable for 5 to 30 minutes or disabled.

**SPECIFICATIONS**

Physical	Dimensions		
		in.	mm
	Height	5.6	141
	Width	8.3	211
	Depth	1.8	43
	Weight	lb	kg.
	Net	2.2	1

CAT. NO.	UPC NO.	DESCRIPTION
TS90INTL	26345	Telescout, International TS90
012154500	60740	Leads
THM5BAT	60756	Rechargeable Battery Pack

## CableScout™ TV220 - TDR Cable Tester for CATV



TV220

- Easier-to-use GUI interface requires little or no training
- PC application is compatible with all the current operating systems
- Improved clarity and trace functionality makes it even easier to identify faults on-screen and determine noise versus the fault
- Even higher SNR and Resolution makes it easier to identify events that were previously difficult or impossible to find
- Zero dead zone at the launch allows the user to see faults immediately
- Improved trace update rate allows you to see changes to the fault faster (5 times/sec. versus 2 times/sec.)
- Higher capacity to hold traces
- USB interface for trace download
- Lighter weight and longer charge life with the new lithium-ion battery
- TestWizard™ one-button testing
- Automatic Return Loss Measurements
- Automatic Multiple Event Marking
- High-Resolution, Short Pulse Width (1 ns)
- Rugged enough to withstand a 2 meter drop

CAT NO.	UPC NO.	DESCRIPTION
TV220	00676	TDR for CATV Broadband
<b>R</b> TV220-0350	17404	Soft Carrying Case
<b>A</b> 1155-1010	25877	Power Supply, AC-DC
<b>A</b> 174173401	21640	Vehicle DC Adapter/Charger
<b>R</b> 174326900	21641	Replacement Power Cord

### SPECIFICATIONS

<b>Output</b>	Test Signal Output – 1/2 Sine Amplitude – 4V into 75 Ω Pulse Width – 1 ns, 5 ns, 25 ns Output Impedance – 75 Ω Acquisition System Bandwidth – 400 MHz
<b>Return Loss</b>	Automatic at cursor location Resolution: ±1 dB Input Protection – ±400 VDC + peak AC up to 440 Hz, 30-second duration Maximum Distance Range – 12,000 ft. (3,658 m), depending on cable type and condition Gain – 0 to 72 dB Waveform Storage – Minimum of 20 waveforms with notes
<b>Distance Accuracy</b>	Feet: 0 to 2,000 ft.: ±2 ft. ± uncertainty in Vp 2,001 to 6,000 ft.: ±3 ft. ± uncertainty in Vp 6,001 to 12,000 ft.: ±4 ft. ± uncertainty in Vp Meters: 0 to 610 m: ±0.6 m ± uncertainty in Vp 611 to 1830 m: ±0.9 m ± uncertainty in Vp 1831 to 3658 m: ±1.2 m ± uncertainty in Vp
<b>Display</b>	Resolution: 640 x 440 (281,600 pixels) Size: 7.2 inch Type: High contrast LCD Backlight: Operator switchable Waveform Display Resolution – 0.33% of selected range, 4.5 cm (0.15 ft.) minimum Display Ranges – Twelve display ranges from 6 ft. (1.8 m) to 12,000 ft. (3,658 m), plus single-button zoom window Output Port – Serial 9-pin D type connector Distance Measurements – Meters, feet, nanoseconds

### SPECIFICATIONS

<b>Power</b>	AC Operation – Voltage Ranges: 110 V, 220 V, or 240 V with appropriate AC to DC adapter Line Frequency: 50 Hz to 60 Hz DC Operation – Voltage Range: 9 to 16 VDC @ 1A (charging and operating)
<b>Battery Operation –</b>	Type: Internal Li-Ion rechargeable battery Operating Time: Typically 12 hours continuous operation (backlight off) Battery Savers (user selectable) – Shutoff: 5 to 30 minutes or disabled Backlight: Shutoff 5 to 30 minutes, disabled, or always on
<b>General Characteristics</b>	Temperature – Operating: –10° C to +40° C (+11° F to +104° F) Non-operating: –20° C to +60° C (–4° F to +140° F) Humidity – 10% to 95% (non-condensing) Field Usage – Shock, water, and dust resistant Durability – Survives drop of 2 meters (6 ft.) to concrete in standard soft case. Drip proof, dust resistant
<b>EMI Emissions –</b>	EN55011, Class A EN60555-2
<b>Safety –</b>	CE (Low Voltage Directive)

### PHYSICAL




Dimensions	Centimeters	Inches
Height	24	9.5
Width	30	11.5
Depth	9	3.5
Weight	Kilograms	Pounds
Net	3	6.4

## CableScout™ TV90



TV90

- High performance easy to use Time Domain Reflectometer for Coaxial testing applications
- Employs optimized pulsing and sampling, coupled with advanced filtering and signal-processing techniques to ensure clean waveform and easy identification
- Context-sensitive help screens for all functions
- Small, portable and lightweight 2.2 lbs. (1kg)
- Includes rechargeable battery pack
- Includes twisted pair adapter and test probe

CAT. NO.	UPC NO.	DESCRIPTION
TV90US	12600	TV90 CableScout™ TDR
 THM5BAT	60756	Rechargeable Battery Pack
 THM5AC	21729	AC Adapter 110V
 TS90-0350	21739	Soft Carrying Case

### SPECIFICATIONS

- Easy to operate (help screens available for all functions)
- Fast fault finding with automatic gain and vertical waveform positioning
- One-button Expand/Full View Function and zoom control.
- Precision accuracy 0-200 ft +/- 2 ft. 1% beyond.
- Range up to 4000 ft.
- High-resolution with optimizing pulse and sampling and advanced filtering
- Input Protection: 200 VDC + Peak AC.
- Rugged - designed for harsh environments
- Large 7.2-in. high-resolution backlit display.
- International power supply options

**Environmental Temperature:**  
 Operating: 32° F to 77° F (0° C to +45° C).  
 Non-Operating: 12° F to 92° F (-20° C to +60° C).  
 Durability: Survives Drop test of 6 foot (2m) to concrete in soft case  
 Power: 110 V, 220 V, 240 V with appropriate power adapter  
 Battery type: 6 AA Alkaline and NiCad rechargeable pack. 4.5 hours continuous operation with adjustable battery saver modes

**Standards** UL, FCC EMI, CAN/CSA, EN, and CE

# WIRE & CABLE IDENTIFICATION

## Classic 77 Series Tone Generators

FEATURES / SPECIFICATIONS	77HP-G	77HP-G/6A	77M-G
Selectable Warble Tone	✓	✓	✓
Continuity Testing	LED & Beeper	LED & Beeper	LED
Polarity Testing	✓	✓	✓
Talk Battery Supply	✓	✓	✓
Two-line Modular Test Lead (RJ-11)	✓	✓	✓
Three-color LED (identifies AC ring voltage)	✓	✓	✓
Weather-Resistant Design	✓	✓	✓
Bent Nose Clips with Bed-of-Nails Penetrator	✓	✓	✓
RJ11 & RJ45 socket	✓	✓	
Lanyard	✓	✓	
Battery Operated (9V not included)	✓	✓	✓



## Classic 77 Series Tone Generators

Permits technicians to identify the conductor within a bundle, at a cross-connect point or at the remote end. Can be used on twisted pair wiring (telecom, datacom, etc.), single conductors, coaxial cables, de-energized AC wiring and most other wiring.



CAT. NO.	UPC NO.	DESCRIPTION
77HP-G	49991	77H-GP Tone Generator
77HP-G/6A	49992	77HP-G/6A Tone Generator (ABN clips)
77M-G	49993	77M-G Tone Generator (basic)

*Note: Not for use on energized AC wiring*

CAT. NO.	UPC NO.	DESCRIPTION
77CS	08686	Leather Belt Holster for Classic 77 Series Tone Generators



## Replacement Piercing Clips



- These traditional telco-style clips can be used with almost any style cordsets.
- Clips feature bent nose design for use on 66 style punchdown blocks and bed-of-nails penetrator for use on insulated wires.
- Package of two clips with red and black boots.

CAT. NO.	UPC NO.	DESCRIPTION
<b>R</b> RPC	08710	Piercing Clips



### Station Master Pro



24B

- Troubleshoot irrigation systems
- Activate and cycle solenoids
- Test solenoids for continuity
- Send tone to identify wires
- Measure clock voltage
- Low battery indication
- Easy-to-understand LEDs
- Test leads with Bed-of-Nails and piercing Pin Clips
- 1-year limited warranty

**SPECIFICATIONS**

<b>Minimum Voltage for Clock LED</b> (LED intensity increases as voltage increases)	15 VAC
<b>Minimum Battery while Testing</b>	10.5 VDC
<b>Maximum Input Voltage between Test Leads</b>	28 VAC
<b>Solenoid Circuit Recharge Time</b>	2.5 seconds
<b>Maximum Distance Range to Activate one Solenoid</b>	12 AWG Loop 3000-13000 feet 14 AWG Loop 2000-8500 feet 18 AWG Loop 500-3000 feet
<b>Power Source</b>	9V alkaline batteries
<b>Battery Life</b>	3 hours continuous
<b>Operating/Storage Temp.</b>	32°F - 122°F (0° - 50°C)

CAT. NO.	UPC NO.	DESCRIPTION
24B	86786	Station Master Pro

### Station Master Pro Kit



24BK

- Troubleshoot irrigation systems
- Chatter mode for audible locating of valves
- Activate any 24V AC valve solenoid
- Test solenoids for continuity
- Send tone to identify wires
- Check clock AC voltage
- Low battery indication
- Easy-to-understand LEDs
- Test leads with 'bed-of-nails' and piercing pin plips
- Tracing valve wiring
- Locates underground solenoids

**SPECIFICATIONS**

<b>Minimum voltage for clock LED</b>	15 VAC
<b>Minimum battery while testing</b>	10.5V DC
<b>Maximum input voltage between test leads:</b>	28 VAC
<b>Solenoid activate output voltage:</b>	27 to 18 VAC
<b>Battery:</b>	2 - 9V Alkaline batteries
<b>Operating/storage temperature:</b>	32°F to 122°F (0°C to 50°C)
<b>Relative humidity (max):</b>	80%

CAT. NO.	UPC NO.	DESCRIPTION
24BK	86787	Station Master Pro Kit

## Professional GX Series Tone Generators



- Microprocessor controlled circuitry for increased reliability
- Two-line polarity indication for fast outlet identification
- Automatic shutoff to prevent battery drain
- Snag-proof boot prevents broken plug tabs
- Convenient wrist/hanging lanyard
- Three distinct, selectable tone signal outputs for multiple line identification
- Two selectable tone power outputs for use on open and shorted pairs
- Independent continuity test function
- Independent talk battery supply with higher output voltage
- Fixed alligator clips and removable modular plug for multiple connection options
- 77GX2 includes premium telco-style bent nose clips with piercing pin and bed-of-nails connectors

CAT. NO.	UPC NO.	DESCRIPTION
77GX	60556	77GX Tone Generator
77GX2	60560	77GX2 Tone Generator

*Note: Not for use on energized AC wiring*

## AdapToner Modular Breakout Tone Generator



- The AT8 Tone Generator makes it simple to test continuity, polarity, send tone and even supply talk battery to any configuration of pairs in 8-position modular jacks and plugs
- Combines the features of our tone generators and a modular breakout adapter
- In-line testing is made simple with both a modular plug and jack on each unit
- 8-position "snag-proof" modular plug
- 8-position jack with protective cover
- Quick reference guide with common wiring configurations
- Selectable solid/warble tone signal
- Tone, continuity and talk battery supply using alligator clips
- Weather-resistant design
- Battery operated (9V not included)

CAT. NO.	UPC NO.	DESCRIPTION
AT8	08693	AdapToner Modular Breakout Tone Generator

*Note: Not for use on energized AC wiring*

## LAN Toner with HUB Blink and Detect



AT8L

- The LAN Toner is designed for the network installation and maintenance professional and can be used on any wiring system including datacom, telecom, security/alarm, audio and CATV
- Blinks HUB, Switch Port, and PC activity lights for fast identification
- Detect LAN hubs & switches
- Provides tone signaling, continuity testing and telephone line polarity indication combined with a modular breakout adapter
- Selectable tone outputs for identifying multiple cable runs
- Includes multiple connection options

CAT. NO.	UPC NO.	DESCRIPTION
AT8L	60583	LAN Toner

Note: Not for use on energized AC wiring

## Tone Test Set



600LS

- Our most comprehensive tone test set
- Traditional alternating tone signal for wire identification
- Audible line condition testing (level) indicates dead, working and off-hook lines
- Line 1 and 2 polarity testing using 4-conductor modular plug
- Improved talk battery supply for communication over inactive pairs
- Tone and test functions using either modular plug or 24" alligator clip leads
- Audible resistance level measurement
- Audible capacitance level measurement
- Battery operated (9V not included)

CAT. NO.	UPC NO.	DESCRIPTION
600LS	08680	Tone Test Set

Note: Not for use on energized AC wiring

## Alarm Loop Verifier/Tone Generator



- Designed specifically for the security and alarm industry, the PE620 can be connected to a normally open or normally closed loop pair and provides a distinct audible tone when the alarm condition occurs
- Latching feature provides a simple method for identifying intermittent failures ("swingers") and confirming operation of switches at remote locations
- In the latching mode, the unit will catch the alarm condition and continue sounding until the tester is reset
- As a tone generator, the unit provides a traditional variable tone that can be applied using the 24" red and black test leads or a convenient 6-position modular plug
- Convenient magnetic back plate allows the PE620 to be mounted directly to the control panel cabinet or door
- Battery operated (9V not included)

CAT. NO.	UPC NO.	DESCRIPTION
PE620	08665	Alarm Loop Verifier/Tone Generator

Note: Not for use on energized AC wiring

## Data Mate™ Precision Tracing Tone Generator



- Trace wire or cable without interfering with digital two-way cable or ADSL services
- The model 7780 Data Mate™ Precision Tone Generator is intended to provide tone for tracing and troubleshooting communication circuits without disrupting digital traffic on the line or adjacent lines
- The high purity of the tracing tones combined with internal isolating filters allows safe tracing on circuits that carry digital services above the baseband (two-way cable and ADSL)
- The high-power differential output of the 7780 makes tones easy to find, even over long distances. Also useful for continuity testing and polarity testing, the 7780 provides the standard warble tone and talk battery supply

- High Power Tone Output.
- Line Voltage and Polarity Indication.
- High Purity Tone Signal.
- Low Crosstalk.
- Low Battery Indicator.
- Filter-isolated Circuitry.
- Two-way Broadband Compatible.
- Modular and Telco Pro Alligator Leads.
- ADSL Service Compatible.
- Long Range.
- Popular, Standard Warble Tone Frequencies Continuity Testing
- Compatible with existing tone.

### SPECIFICATIONS

#### Electrical

Output Power	+9dBm
Output Signal Frequency	577/982 Hz alternating
Output Impedance	3,500 ohms minimum, 25kHz to 1.1 MHz

#### Mechanical

Length 5.5" (140 mm)	Depth 1.0" (25 mm)
Width 2.25" (57 mm)	Weight 0.38 lbs. (0.17 kg)

CAT. NO.	UPC NO.	DESCRIPTION
PE7780	60777	Data Mate™ Tone Generator

Note: Not for use on energized AC wiring



### Tone Probes Selection Guide

MODEL NO.	200B-G	200EP-G	200GX	200FP	200XP	500XP
Powerful 2" Rear-fire Speaker	✓	✓	✓	✓	✓	✓
One-button Operation	✓	✓	✓	✓	✓	Two-Button
Adjustable Volume Control	✓	✓	✓	✓	✓	✓
LED for Visual Signal Strength Indication		✓	✓	✓	✓	✓
Recessed Tabs for Telephone Test or Headset Connection			✓	✓	✓	
Headset Jack (audio shock protected)		✓				✓
LED Flashlight		✓				
Noise Filtration				✓	✓	✓
Replaceable Tip	✓	✓	✓	✓	✓	✓
Five-Minute Auto Shutoff				✓	✓	✓
Low-battery Indicator				✓	✓	✓
Battery Operated (9V not included)				✓	✓	✓
Water Resistant						✓
"Mains Power" Warning (acAlert® option)						✓
Patented				✓	✓	✓



### Tough & Water Resistant Multi-Filter Tone Probe



- Water resistant (floats) and tough, combined with all the very best digital signal processing filtering 500XP will help identify signals buried in the worst of noise
- Simple two-button operation with dual signal strength indicating LEDs can work with any tone generator
- Headset allows discrete use in quiet environments and can help in acoustically noisy areas
- Option to enable acAlert®, which helps warn users if brought near hazardous ac power voltages which may be inaudible if using the advanced filtering

CAT. NO.	UPC NO.	DESCRIPTION
500XP	01125	500XP Pair Tracing Probe (POS)
500XPB	01085	500XP Pair Tracing Probe (Boxed)
HS001	01126	Replacement Headset
500XPH	02642	500XP Pair Tracing Probe Holster

### Tone Probe Amplifiers



- Used in conjunction with any tone generator, Tone Probe Amplifiers permit wire and cable identification without having to make direct metallic contact with the conductor
- All models feature a powerful speaker for noisy environments, recessed on/off button control and high gain for accurate wire identification in congested cable bundles and equipment rooms
- The 200B-G also includes adjustable volume control for precise identification
- The 200GX also includes an LED for visual signal strength indication and recessed telephone test set connectors
- The 200EP-G also includes a headset jack (audio shock protected) and an LED Flashlight for working safely behind furniture, inside racks or in dim lighting conditions

CAT. NO.	UPC NO.	DESCRIPTION
200B-G	49986	Tone Probe, Basic
200GX	60557	Tone Probe, Standard
200EP-G	49987	Tone Probe, Standard, with Headset Jack & Flashlight
200C	08670	Leather Belt Holster for 200 Series Tone Probe Amplifiers

## Filter Tone Probe



- By selectively filtering out 60Hz (or 50Hz) and its harmonics, the 200FP can be used with any tone generator for faster, more accurate, cable and wire identification
- Slim, comfortable design for use in limited-space areas
- Recessed on/off push-button control to conserve battery life
- Adjustable sensitivity/volume control to increase accuracy
- Blended carbon/plastic tip to reduce the risk of shorting terminals
- Patented

CAT. NO.	UPC NO.	DESCRIPTION
200FP	08672	Filter Tone Probe (60Hz mains)
200FP/50	60467	Filter Tone Probe (50Hz mains)

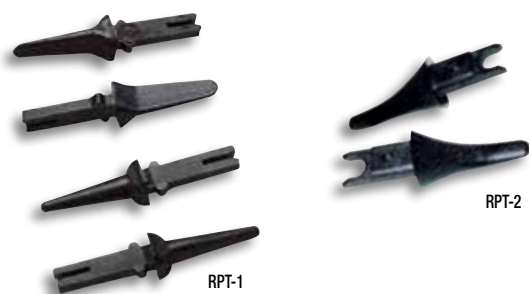
## Multi-Filter Tone Probe



- Single button selects between default mode and two kinds of powerful noise filters
- Filtering means faster, more accurate pair tracing
- Digital signal processor for accuracy and sensitivity
- Durable, light weight
- Audible and visible signal detection
- Continuous, wide-range volume control
- Butt set terminals
- Field replaceable tip, spare tip included
- Uses a single 9V battery
- One probe for many applications
- Works with any tone generator
- The narrowband filter mode is especially well suited for 577Hz Telco tone sources and a version is available for 1kHz systems (983Hz)

CAT. NO.	UPC NO.	DESCRIPTION
200XP	60887	Multi-Filter Tone Probe (60Hz mains, 577Hz narrowband)
200XP/50	60888	Multi-Filter Tone Probe (50Hz mains, 983Hz narrowband)

## Replacement Plastic Tips for 200 Series Probes



- Plastic tips perform much the same as traditional metal tips while reducing the risk of shorting terminals
- Specially formulated with a carbon powder and carbon fiber blended plastic
- Tips fit 200B, 200EP, 200GX, 200FP and 200XP probes
- RPT-1 comes with two pencil-style tips and two spade-style tips

CAT. NO.	UPC NO.	DESCRIPTION
<b>R</b> RPT-1	08711	Plastic Tips for 200B, 200EP, 200FP and 200XP
<b>R</b> RPT-2	60561	Plastic Tips for 200GX

## Replacement Metal Tips for 200B and 200EP Probes



- Metal tips provide maximum performance when probing insulated wires or making direct metallic contact
- Made of nickel-plated brass
- Tips fit 200B and 200EP probes
- Package contains two pencil-style tips

CAT. NO.	UPC NO.	DESCRIPTION
<b>R</b> RMT-1	08709	Metal Tips for 200B and 200EP Probes

## Precision Tone Generator



177

- Used in the telecommunications industry for pair identification and fault locating
- Supplies a precise 577.5Hz crystal controlled signal frequency.
- Variable output allows technicians to adjust signal strength to suit field conditions and improve accuracy
- Designed to work with any common amplifier and exploring coil for aerial fault locating
- For communications over inactive pairs, the unit supplies talk battery to power two telephone test sets (buttsets)
- Each of the three test leads is equipped with traditional bent nose piercing clips with "bed-of-nails" insulation piercing pins
- The tone generator and test leads fit neatly in a durable, protective woven polyester carrying case with shoulder strap
- Battery-operated (1 – 6V lantern included)

CAT. NO.	UPC NO.	DESCRIPTION
177	08657	Precision Tone Generator

### SPECIFICATIONS

<b>Power Requirements</b>	One 6V lantern battery
<b>Battery Life</b>	40 hours nominal
<b>Transmitter Frequency</b>	577.5Hz pulsed at 1Hz, crystal controlled
<b>Output Voltage</b>	0.1 to 80Vp-p
<b>Output Signal Level</b>	0 to +30dBm
<b>Construction</b>	High impact ABS plastic in woven polyester case
<b>Dimensions</b>	7.25" x 5.5" x 4.5" in case
<b>Weight</b>	3 lbs. with battery

## T-Bug® Digital Signal Identifier



0134-0500

- Used to detect digital signals on twisted pair cables, identify and isolate digital pairs for special handling and help technicians avoid accidentally putting pairs out of service
- Operation is non-invasive and does not involve metallic contact so there's no risk of service interruption
- Simple to use – just place the probe between the pairs in question
- Differential amplifier saves time by allowing the technician to determine whether the signal is truly present or is an induced signal from adjacent pair
- False readings due to noise are virtually eliminated
- Continuous self test ensures that the unit is functioning properly
- Emits both visible and audible indication when digital signals are present
- Patented

CAT. NO.	UPC NO.	DESCRIPTION
0134-0500	60764	T-Bug® Digital Signal Identifier

## Classic Tone and Probe Kits



701K-G

- 701K-G Kits include the 77HP-G High Power Tone Generator and the 200EP Tone Probe Amplifier in a rugged, woven nylon carrying case (700C)
- 601K-G Kit is a more basic version of the 701K-G kit, and includes the 77M-G Tone Generator and the 200B-G Tone Probe amplifier in a zippered nylon pouch

CAT. NO.	UPC NO.	DESCRIPTION
601K-G	49989	Classic Tone and Probe Kit, Basic
701K-G	49990	Classic Tone and Probe Kit, Standard
701K-G/6A	35775	Classic Tone and Probe Kit, Standard with ABN clips

## Premium Tone and Probe Kit



801K

- Designed for more accurate wire identification, the 801K virtually eliminates power-related noise from the tone and probe operation
- Kit includes the 77HP/6A High Power Tone Generator and 200 FP Filter Probe in a convenient Cordura® case (700C).

CAT. NO.	UPC NO.	DESCRIPTION
801K	08690	Premium Tone and Probe Kit
801K/50	60466	Premium Tone and Probe Kit (50Hz)

## Xpert Tone and Probe Kit

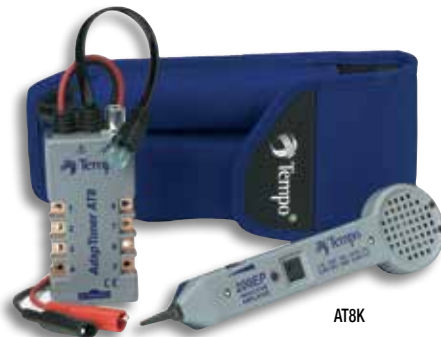


811K

- The Xpert Tone and Probe Kit includes the 77GX (or 77GX2) Tone Generator and 200XP Multi-Filter Tone Probe Amplifier in a rugged, woven nylon carrying case
- Especially suited for tracing in noisy environments

CAT. NO.	UPC NO.	DESCRIPTION
811K	36001	Tone and Probe Kit, Xpert
811K/6A-BOX	26375	Tone and Probe Kit, Xpert with ABN clips

## AdapToner Kit



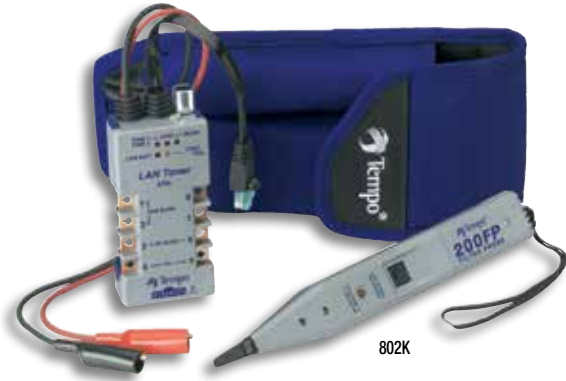
AT8K

- Designed for fast, accurate wire identification by combining the features of our tone generators and modular breakout adapter
- Kit includes the AT8 Modular Breakout Tone Generator and 200EP Inductive Amplifier in a convenient carrying case (700C)

CAT. NO.	UPC NO.	DESCRIPTION
AT8K	08694	AdapToner Kit



### 802K Digital LAN Tracing Kit



- The 802K Digital LAN Tracing Kit is a powerful, unique troubleshooting and tracing solution for LANs and other types of VDV wiring. The industry standard 200FP filter probe (60Hz) is designed to eliminate hum from fluorescent lights and AC power wiring that can obscure tracing tones
- The AT8L LAN Toner not only generates multiple tracing tones and provides basic wiring tests, but indicates the presence of 10/100Base-T network service

CAT. NO.	UPC NO.	DESCRIPTION
802K	36000	Digital LAN Tracing Kit

### LAN Toner Kit



- Designed for the network installation and maintenance professional, the LAN Toner sends tone and blinks HUB, Switch Port, and PC activity lights for fast identification. This kit can be used on any wiring system including Datacom, Telecom, security/alarm, audio and CATV
- Kit includes the AT8L LAN Toner and the 200GX Inductive Amplifier in a rugged, woven nylon carrying case (700C)

CAT. NO.	UPC NO.	DESCRIPTION
AT8LK	60584	LAN Toner Kit

### CATV Cable Tone Test Kit



- Designed specifically for the CATV industry, this kit allows you to tone through splitters, directional couplers and traps
- Simple to use, the 402K provides accurate results and will eliminate long delays trying to figure out non-tagged or mis-tagged cable drops
- Kit includes one transmitter, one receiver, one male F-to-F connector adapter cable, one male F-to-alligator clip adapter cable and a carrying case (700C)
- Transmitter and receiver are equipped with female F-connectors
- Three methods of signal reception: electrostatic pickup for non-terminated cables, electromagnetic pickup for terminated or shorted cables and direct connection when identifying in the presence of passive devices
- In continuity mode, provides both audible tone and LED display
- Identifies the presence of AC or DC voltage on the cable under test
- Four selectable tone outputs for multiple line identification

CAT. NO.	UPC NO.	DESCRIPTION
402K	08677	CATV Cable Tone Test Set
R 402T	60376	Transmitter
R 402R	60377	Receiver
R CS9	60374	Male to male F-connector adapter cable
R CS19	60378	F-connector to alligator clip

## Security and Alarm Kit



- Designed specifically for the security and alarm industry, the 620K provides a simple method for identifying intermittent failures (swingers) and confirming operation of switches at remote locations
- To better satisfy industry requirements, we've combined the Model PE620 Tone Generator with the popular Model 200EP Inductive Amplifier in a durable woven nylon pouch (700C)

CAT. NO.	UPC NO.	DESCRIPTION
620K	08682	Security and Alarm Kit

## Tone and Probe Plus Cable-Check™



### RJ45 LAN Tester

- True cable mapping function identifies:
  - Good connection, opens, shorts and crosses
  - Connector and cable pin-out
  - Clear LED display for each pin and shield
  - Shielded RJ45 modular plug socket
- Automatic display of mapping with dual speeds: slow or fast
- Tests RJ11 and RJ45 cables with runs up to 600'
- Check polarity of telephone line
- View telephone line status: dial tone, ringing or busy line
- Provides talk power for telephone lines and butt set use
- Selectable dual/single tone application for balanced and unbalanced circuits
- Four tone generator patterns
- Test continuity of wires, cables and loads
- Tone generator features auto-off function
- Jack for headset
- Audible speaker with adjustable volume control

CAT. NO.	DESCRIPTION
PA1573	Tone & Probe Plus Cable-Check™ Kit

### Cabling Pouch

750C



- Designed to hold a complete set of wiring tools including: any (one) 77 Series Tone Generator, any (one) 200 Series Inductive Amplifier, a punchdown tool, a cabling knife and scissors
- Convenient loop to hold most telephone test sets
- Removable “parts pouch” allows you to keep small components in reach
- Made of a durable woven nylon
- Fits belts up to 5" wide.

CAT. NO.	UPC NO.	DESCRIPTION
750C	08685	Cabling Pouch

### Tone and Probe Carrying Case

700C



- Allows you to build your own kit using any tone generator and 200 Series probe
- Durable woven nylon
- Fits belts up to 3" wide

CAT. NO.	UPC NO.	DESCRIPTION
700C	08683	Tone and Probe Carrying Case

# STRUCTURED WIRING TESTERS

## NETcat® Pro 2 NC-500



NC-500



NC-510  
(NC-500 not included)



NC-520

### NC-500 Contents:

- NETcat Pro 2 main unit with stylus
- Removable remote jack and patch lead test and ID unit
- Twisted-pair (modular RJ45), coax (F) and alligator clip test cords
- 9V alkaline battery

### NC-510 NETcat Pro 2 Accessory Kit Contents:

- Seven additional remote jack test and ID units, RJ45 and F (male)
- Carrying case to hold additional remote test ID units and content of NC-500 main kit

### NC-520:

- Netcat Pro 2 Main Unit With Stylus
- Removable Remote Jack And Patch Lead Test and Id Unit
- Twisted-Pair (Modular Rj45), Coax (F) And Alligator ClipTest Cords
- Seven additional remote jack test and ID units, RJ45 and F (male)
- Carrying case to hold additional remote test ID units and content of NC-500 main kit
- 9V Alkaline Battery

- Test and troubleshoot telephone, data and coax wiring
- NETcat Pro 2 Additional Features:
  - Gigabit device capability detection (still detects 10baseT and 100baseT too)
  - Cable type, velocity of propagation library, user editable
  - Power over Ethernet (PoE) detection
  - Memo pad
- Detect split pairs, short circuits, broken and crossed wires
- Step TDR technology shows length to open or short of all pairs
- Test shielded twisted-pair (STP), unshielded twisted-pair (UTP) & coaxial cables.
- Test patch cords and remote jacks
- Touch-screen control, included stylus slots into main unit
- Large icons ensure easy use with your finger too
- Large 3" (76mm) backlit high-contrast (user adjustable) monochrome display is highly visible in dark or brightly lit areas
- Remote test and ID unit stores in base of main unit
- Can identify up to 8 remote test ID units (7 extra available in NC-510 accessory kit along with carrying case)
- Tone generator with four selectable precision frequency tones, compatible with Greenlee advanced digital signal processing probes
- Operates on single 9V battery with low battery indication

### SPECIFICATIONS

<b>Dimensions</b>	3.3" x 1.4" x 6.7" (8.5 cm x 3.5 cm x 17 cm)	
<b>Weight</b>	0.45 lb. (200 g)	
<b>Power</b>	9V Alkaline battery (PP3)	
<b>Requirements</b>		
<b>User Interface</b>	Display LCD	Dot Pixels: 128 x 128 dots
	Viewing Area	60.0 x 58.4
	Backlight	White LED
	Buttons	LCD touch-screen, Single momentary contact push button
<b>Environmental</b>	Operating Temperature	0°C to 50°C
	Storage Temperature	-20°C to 70°C
<b>Interface</b>	RJ45 shielded jacks	
<b>Connections</b>	F-type threaded female coaxial connectors	
<b>TDR</b>	User selectable based on a known cable length.	
<b>Calibration</b>	40% to 100% in steps of 1%	
<b>TDR Range</b>	0 to 2000 ft. -	
<b>Resolution</b>	1 ft. (0.3 m)	
<b>Accuracy to Open/Short</b>	±4% or 2 ft. (0.6 m) whichever is greater	
<b>Remote Identifier</b>	2000 ft. (609.6 meters) maximum distance	
<b>Wiremap</b>	358 ft (100 meters) maximum distance	

CAT. NO.	UPC NO.	DESCRIPTION
NC-500	23639	NETcat Pro 2 Digital VDV Wiring Troubleshooter
<b>A</b> NC-510	23640	NETcat Pro 2 Accessory Kit w/carry case
NC-520	05450	Netcat Pro 2 Main Unit With Stylus



**NETcat® Micro NC-100**

NC-100

- Tests shielded twisted pair (STP), unshielded twisted pair (UTP) and coaxial cables
- TIA/EIA standard wiring pair verification
- Detects shorts, opens, reversed polarity, crossed and split pairs
- Generates three distinct, selectable digital tone patterns for cable tracing and troubleshooting
- Tracing modes can be adjusted for high performance LAN cables.
- Complete set of connector types standard (telephone, LAN and coax)
- Nested remote allows end-to-end testing of all wiring types
- Simple testing of LAN wiring and phone lines
- Detection of common wiring and connector errors
- Warning of hazardous voltages
- Checks for reversed telephone wires

**SPECIFICATIONS**

<b>Dimensions</b>	150 x 70 x 33mm	
<b>Weight</b>	220g including remote unit and battery	
<b>Power Source</b>	9V Alkaline battery (PP3)	
<b>User Interface</b>	<b>Display LCD</b>	Icon and seven segment type
	<b>Backlight</b>	Green LED
	<b>Buttons</b>	Four momentary contact push button
<b>Environmental</b>	Operating Temperature	0°C to 50°C
	Storage Temperature	-10°C to 60°C
	Humidity	up to 95% non-condensing
<b>Interface Connections</b>	RJ45 shielded socket	
	RJ12 6-way socket	
	F-type threaded female coaxial connectors	
<b>Network Split</b>	Minimum cable length	2 to 3 meters (5 to 10 ft.) depending on cable type
<b>Pair Detection</b>	Alternating frequencies of 577Hz and 983Hz are produced at three user selectable rates. Designed for standard tone probes, but compatible with precision digital Greenlee tone probes.	

CAT. NO.	UPC NO.	DESCRIPTION
NC-100	23636	NETcat® Micro Digital Voice Data and Video Wiring Tester

## LAN ProNavigator® Tester & Remote



- Simple PASS/FAIL test results in one second allows technicians to quickly move on to the next test site
- Generates oscillating audio tone for use with tone probes to locate cables
- Tests data and telephone cables up to 320 feet (100 meters) for proper pairing for EIA/TIA-568A, EIA/TIA-568B, Token Ring, 10 Base T, and common category 5 configurations
- Tests unshielded UTP and shielded STP data cable
- Detects good connections, open connections, crossed wires and split pairs
- Tests common BNC connected 50 and 75 ohm coaxial cables up to 320 feet (100 meters) for continuity
- Tests coaxial cable types RG58, RG59, RG6, RG6 Quad, Belden 8281, RG8, RG11 and more
- Belt clips provided and lanyard holes embedded in case to attach to belt or wrist
- Features low battery test and auto-off function to preserve battery life
- Includes standard 9V battery

CAT. NO.	DESCRIPTION
PA1543	LAN ProNavigator® test set (main & remote), 2 RJ45 patch cords, 2 belt clips, 12 oz.(342 g)
PA901066	LAN ProNavigator® test set (main & remote), 2 RJ45 patch cords, 2 BNC coaxial cables, 2 CATV "F"-to-BNC adapters, 1 BNC/BNC adapter, 1 shielded RJ45 coupler, 2 belt clips in durable case
PA901074	Adapter, CATV "F" (female) to BNC (male)

*NOTE: May not be compatible with CAT-6 flat or oval cable, or bonded cable.*

SPECIFICATIONS	MAIN	REMOTE	KIT
<b>Weight</b>	8 oz. (228 g)	2 oz. (57 g)	2 oz. (1140 g)
<b>Dimensions</b>	5.25" x 6.75" x 2.25" 133 mm x 171 mm x 57 mm	3.45" x 1.6" x 0.9" 87 mm x 41 mm x 24 mm	8.5" x 7.6" x 3" 216 mm x 193 mm x 76 mm

## Wiremap Tester



468

- Quickly identifies opens, shorts, reversals and transposed pairs
- Economical tester includes all the basic functions
- Connecting the receiver unit automatically activates the test process
- Sequencing red and green LEDs provide fast, accurate and simple-to-understand results
- Alerts the technician if connected to an active circuit without harming the unit
- Connect any eight-position modular plug to the appropriate jack on the transmitter and a sweeping tone signal is applied to all pairs
- At the far end of the cable, use any Greenlee Communications inductive amplifier (probe) to locate the corresponding plug or jack
- Battery operated (9V not included)

CAT. NO.	UPC NO.	DESCRIPTION
468	08661	Wiremap Tester
468C	60382	Carrying Case for the Wiremap Tester
468T	60379	Transmitter
468R	60380	Receiver
CS10	60381	Modular Adapter Cable

## Data/Link ID and Cable-Check™



PA1576

- Cable mapping function tests data & phone connection schemes including patch cords and installed cables
- Identifies cross-over telephone connections
- Detects PC (NIC) & HUB data transmissions and PC (NIC) & HUB NLP or FLP link pulse
- Identify data & link transmission speeds with real time detection: 100/10 MB
- Automatically scans with choice of slow or fast speeds
- Low battery detection on LAN ID tester
- Includes 9V battery, 2 RJ45 patch cords and durable nylon carrying case with belt loop

CAT. NO.	DESCRIPTION
PA1576	Data/Link ID and Cable-Check™

## LAN Cable-Check™



PA1574

- Identifies cross-over telephone connections
- Automatically scans when cables connected and unit turned on
- Two scan speeds: fast or slow
- Maps connector and cable pin-out
- Tests cables up to 1,650' or 500 m
- Also tests RJ11 connections using an RJ11 adapter (not included).
- 2, RJ45 patch cords and 9V battery included
- Contained in a durable nylon carrying case with belt loop

CAT. NO.	DESCRIPTION
PA1574	LAN Cable-Check™ Tester

## LAN and A/V Cable-Check™



PA1594

### Network

- Tests RJ45 patch cords and network installations to identify good connections, opens, shorts or cross-connections
- Identifies data and telephone connection schemes
- Maps cable pin-out

### Coax

- Tests continuity of cords and installed cable runs
- Identifies good connections, opens and shorts

### Features and Benefits:

- Automatic scanning
- User selectable slow or fast speeds
- Quickly check cable installations and patch cords
- Easy-to-use with clear LED read-outs

### Includes:

- 2 RJ45 patch cords
- 75-ohm male terminator
- Cable TV "F" female adapter
- 9V battery
- Durable, nylon carrying case
- RCA to CATV "F" adapter.

CAT. NO.	DESCRIPTION
PA1594	LAN and A/V Cable-Check™

## PC Cable-Check™ PRO



PA1577

- Quickly & easily troubleshoot cables to eliminate the cable as the source of a problem
- True cable mapping for over 20 different cable types: BNC coax & S-Video, VGA, Firewire, USB & Mini-USB, PS/2, parallel printer, RS-232 serial and Cat5e or Cat6 LAN
- Supports these connectors: male and female DB9, DB15, DB25 and HDB15; 36-pin Centronics printer; RJ11, RJ12, RJ45 shielded & unshielded; BNC coax female; male and female mini-DIN6; female mini-DIN4; USB-A and USB-B; mini-USB 5-pin; IEEE 1394 FireWire 4- and 6-pin
- Tests 50 ohm cables up to 1000' (305 m) & 75 ohm cables up to 600' (183 m)
- Easy to read and understand LED indicator lights
- New rugged case with built-in handle for easy transport
- Auto scan or manual scan modes
- Rubber feet grip to desk or bench to prevent slipping
- Auto-off after 30 seconds of non-use to extend battery life
- 9V battery included

CAT. NO.	DESCRIPTION
PA1577	PC Cable-Check™ Pro

# BURIED FACILITY LOCATION AND MARKING

## Tracker II



501

HS-1 (08695)  
Optional headset is available for use in high-traffic areas or other noisy environments.

- Traces the path and determines the depth of wires and metallic pipes on active or dead systems without having to deactivate the system
- Lightweight receiver provides audible and visual indications of signal strength
- Transmitter output and receiver sensitivity are fully adjustable for maximum accuracy
- Transmitter offers three methods of connection: direct, inductive coupler and inductive antenna
- Includes transmitter assembly, receiver assembly, inductive coupler (clamp), built-in inductive antenna, two 8' (2.4 m) test leads with heavy-duty alligator clips and durable polyethylene case
- High frequency transmitter provides range up to 4,000' (1,219 m) and depths up to 7' (2 m)
- Receiver is 32" long (813 mm)
- Battery operated (eight AA and one 9V battery is included)
- Molded carrying case included

CAT. NO.	UPC NO.	DESCRIPTION
501	08662	Tracker II
501T	60353	Transmitter
501R	60352	Receiver
IC1	60354	Inductive Clamp
CS16	60355	Transmitter Cord Set
500CA	60351	Case with Antenna



### SPECIFICATIONS

<b>Power Requirements</b>	Transmitter – (8) AA batteries; Receiver – (1) 9V battery
<b>Battery Life</b>	Transmitter – 30 hours nominal; Receiver – 10 hours nominal
<b>Transmitter Frequency</b>	447.5kHz
<b>Transmitter Power</b>	40Vp-p (140mW) maximum
<b>Voltage Protection</b>	240VAC/500VDC
<b>Automatic Shut Off</b>	90 Min. Transmitter and Receiver
<b>Construction</b>	Transmitter/Receiver – powder coated aluminum Case – vacuum formed polyethylene
<b>Dimensions</b>	Transmitter – 4.25" x 3" x 3.25" (108 x 76.2 x 82.6 mm) Receiver – 32" x 2.75" x 4" (812.8 x 69.9 x 101.6 mm) Case – 33.5" x 8.25" x 3.75" (850.9 x 209.6 x 95.3 mm)
<b>Weight</b>	6.7 lbs. complete kit (3.04 kg)

## Buried Line Locator



BLL-200



- LED and LCD signal strength indicators make it quick and easy to find exact line location
- Lightweight and ergonomically balanced
- Automatic signal boost makes it easy to trace lines, even those with very weak signals
- Receiver may be used in active or passive mode
- Receiver locates multiple passive frequencies with a single setting
- Receiver automatically locks out passive range when it detects a transmitter signal, reducing the chance of tracing other lines carrying weaker signals
- Microprocessor-based circuitry delivers increased accuracy and features auto-gain control in all environments
- Traces 20' (6 m) underground and provides depth readings up to 15' (4.57 m).
- Transmitter can be connected to live lines up to 600V
- Molded carrying case included
- Limited Lifetime Warranty

CAT. NO.	UPC NO.	DESCRIPTION
BLL-200	07796	Buried Line Locator

### SPECIFICATIONS

<b>Transmitter</b>		<b>Receiver</b>	
<b>Operating Voltage</b>	0-600VAC, 0-300 VDC	<b>Depth Range</b>	Measures: 0-15 ft Traces: 0-20 ft
<b>Current</b>	13mA (open line) 150mA (live or shorted line)	<b>Depth Resolution</b>	0.1 ft. increments
<b>Frequency</b>	33.3kHz	<b>Passive Trace Frequency</b>	- 12Hz-24kHz
<b>Operating Temperature</b>	0°F to 120°F (-17°C to 50°C)	<b>Operating Temperature</b>	0°F to 120°F (-17°C to 50°C)
<b>Size</b>	7.5" x 4" x 2.1" (190.5 mm x 101.6 mm x 53 mm)	<b>Size</b>	4.1" x 8.5" x 38" (104.1 mm x 215.9 mm x 965.2 mm)
<b>Power</b>	6 VDC (4 AA batteries)	<b>Power</b>	6 VDC (4 AA batteries)
<b>Weight</b>	15 oz. (425 g) (with batteries and clamp)	<b>Weight</b>	1 lb. 12 oz. (794 g)



## Pulser Fault Locator



- Identifies the exact location of even the smallest breaks in insulation by “pulsing” a high-voltage signal that radiates into the earth at the location of the faults. With the A-frame mounted receiver, a visual analog meter points the way to the source of the voltage
- Multiple faults on a single wire can be identified indicating the need to replace instead of repair
- Extra-long test leads feature heavy-duty alligator clips for use on multiple cable types
- Includes a rechargeable transmitter, receiver, A-frame, ground stake, 120V charger and a 12V DC (cigarette lighter) adapter
- Battery operated (one 12V and one 9V battery are included)
- Molded carrying case included

### SPECIFICATIONS

<b>Power Requirements</b>	Transmitter: (1) 12V rechargeable battery Receiver: (1) 9V battery
<b>Battery Life</b>	Transmitter: 23 hours per charge; Receiver: 200 hours
<b>Transmitter Power</b>	2400VDC peak
<b>Voltage Protection</b>	240VAC/400VDC
<b>Construction</b>	Transmitter – aluminum housing in polyethylene case Receiver – powder coated aluminum
<b>Dimensions</b>	Transmitter – 17" x 8.5" x 6.5" (421 mm x 215 mm x 160 mm) in case Receiver – 33.5" x 21.75" x 3.25" (840 mm x 550 mm x 8 mm) on A-Frame
<b>Weight</b>	12.5 lbs. (5.7 kg) complete

CAT. NO.	UPC NO.	DESCRIPTION
PE2003	08666	Pulser
<b>R</b> 2000H	60357	Transmitter (Includes CH1 & CH2)
<b>R</b> 2000R	60358	Receiver
<b>R</b> AF2	60482	A-Frame
<b>R</b> CH1	60360	AC Charger
<b>R</b> CH2	60361	DC Charger
<b>R</b> 59F0002	66216	Battery, Replacement (12V 2.5 Ah)

## Wire Finder/Mini Locator



- Traces energized or non-energized wires in walls and drop ceilings
- Provides reliable results on buried cables to depths of 3' (1 m) and lengths up to 1000' (308 m)
- Determines the approximate depth of the wire before digging
- Compact design and easy-to-understand operations
- Fully adjustable transmitter and receiver for accurate locating
- Quick change test leads for use in any industry, even international power outlets
- Voltage protection to allow use on live AC circuits
- Automatic shut-off to prevent accidental battery discharge
- Housed in a durable, molded carrying case with a quick reference operation guide on the inside of the lid
- Battery-operated: (2) 9V batteries included

### SPECIFICATIONS

<b>Power Requirements</b>	(1) 9V each (transmitter and receiver, included)
<b>Battery Life</b>	Transmitter 35 hours nominal; Receiver 20 hours nominal
<b>Transmitter Frequency</b>	447.5kHz
<b>Transmitter Power</b>	9Vp-p (11mW)
<b>Voltage Protection</b>	240VAC/500VDC
<b>Construction</b>	Transmitter/Receiver – high-impact ABS plastic, Case – vacuum-formed polyethylene
<b>Dimensions</b>	Transmitter – 4" x 2.3" x 1" (101.6 x 58.4 x 25.4 mm), Receiver – 6" x 2.35" x 1" (152.4 x 59.7 x 25.4 mm), Case – 9.5" x 8" x 3" (241.3 x 203.2 x 76.2 mm)
<b>Weight</b>	2.6 lbs. (1.2 kg)

CAT. NO.	UPC NO.	DESCRIPTION
508S	08678	Wire Finder/Mini Locator
<b>R</b> 508ST	60363	Transmitter
<b>R</b> 508SR	60364	Receiver
<b>R</b> CS14	60366	Alligator Clip Cord set
<b>R</b> CS15	60367	AC Outlet Cord set

## Wire and Valve Locator



521A

- Adjustable transmit power allows you to select the best signal for maximum performance
- Transmitter's high power output offers extended range and use on higher resistance wire paths that other locators can't touch
- Receiver provides both audible and visual indications of signal strength.
- Lightweight receiver wand makes it easy for you to move along quickly to locate even the longest wire path
- Rugged headphones block ambient noise and improve "feel" for the signal
- Includes transmitter, receiver, headset, ground stake, and complete instructions
- Battery-operated: (8) "D" Cells and (1) 9V

### SPECIFICATIONS

<b>Power Requirements</b>	Transmitter: (8) "D" Cell; Receiver: (1) 9V battery
<b>Battery Life</b>	Transmitter: 50 hours nominal Receiver: 100 hours nominal
<b>Transmitter Frequency</b>	1748Hz
<b>Transmitter Power</b>	750Vp-p 285Vrms
<b>Voltage Protection</b>	120VAC/250VDC
<b>Construction</b>	Powder-coated aluminum housing in polyethylene case
<b>Case Dimensions</b>	33.5" x 8.25" x 3.75"
<b>Weight</b>	12 lbs. complete

CAT. NO.	UPC NO.	DESCRIPTION
521A	86788	Wire and Valve Locator
521A-R	12623	Receiver
HS-1	08695	Headset

## Locators Application Guide

FEATURE	BLL-200	501	PE2003	508S	521A
Trace concealed wiring in walls and floors		•		•	
Locate junction box relays and transformers	•				
Locate switch gear	•				
Find shorts to ground			• <sup>2</sup>		• <sup>1</sup>
Trace wires in PVC (nonmetallic conduit)	•	•		•	
Find opens in a circuit					•
Localize power and lighting panels	•	•		•	
Operate on energized circuits	•	•		•	
Operate on telecom circuits	•	•	•	•	
Operate on power circuits (600VAC)	•				
Operate on unenergized circuits	•	•	•	•	•
Trace shielded cable	•	• <sup>3</sup>		• <sup>3</sup>	• <sup>3</sup>
Trace buried metal conduit					
Trace coax cable	•	• <sup>5</sup>		• <sup>5</sup>	• <sup>4</sup>
Auto gain circuitry for improved accuracy	•				
AC voltage range	0-600V	0-240V	0-240V	0-240V	0-120V
DC voltage range	0-300V	0-500V	0-400V	0-500V	0-250V
Distance—receiver from transmitter	5,000 ft.	• <sup>7</sup>	5000 ft.	1000 ft.	• <sup>6</sup>
Transmitter battery	(4) AA	(8) AA	12V rechargeable	(1) 9V	(8) D
Receiver battery	(4) AA	(1) 9V	(1) 9V	(1) 9V	(1) 9V

1. 10,000 ohms and less—both ends isolated from grounds.  
 2. Does not locate the path—has to be predetermined and only in direct burial applications. 5,000,000 and less.  
 3. Transmitter connected to metallic shield.  
 4. Will trace coax providing the b0nd is in place at the remote end—will disrupt service.  
 5. No sorting (high RF bleeds) can trace coax if transmitter connected to braid.  
 6. Low frequency locators need a "path to earth" (dirt), 5000 ft. on an open conductor and 2500 ft. on a metallic pipe at 3 ft. deep

7. Direct Connection 4,000 ft at 7 ft deep  
 Inductive Coupler 1,000 ft at 3 ft deep  
 Inductive Antenna 700 ft at 3 ft deep

## Marker-Mate®



EML100

- Designed to locate buried electronic markers, including Omni Marker™, and Uni Marker®
- Five+ foot depth range
- Detects up to seven different marker types
- Scan mode provides simultaneous detection of all marker types
- User-adjustable Detection Threshold
- Digital signal processor accuracy
- Large-character display is easy to read
- Bar graph, numeric & audible signal strength indicators
- Speaker volume adjust
- Headphone jack
- Battery level indicator
- Low battery warning
- Adjustable time out feature prolongs battery life (and can be turned off)
- Weather resistant
- Rugged construction

### SPECIFICATIONS

<b>Electrical:</b>	Twelve AA batteries Battery Life: 20 hours typical
<b>Environment:</b>	Operating Temperature: -4°F to 122°F (-20°C to 50°C) Storage Temperature: -40°F to 158°F (-40°C to 70°C) Weather Resistant
<b>Physical:</b>	Length: 30.7 in. (780 mm) Width: 7.8 in. (198 mm) Height: 12.8 in. (325 mm) Weight: 4.5 lbs. with batteries (2 kg)

CAT. NO.	UPC NO.	DESCRIPTION
EML100	60798	Marker-Mate Electronic Marker Locator

## Omni Marker™



- Electronically marks and relocates buried facilities
- Unique design produces a uniform, spherical RF field in every direction
- Easily located up to 5' away with any modern marker locator
- Wider field with a signal peak directly above the marker provides precise location
- Requires no particular orientation when buried
- Greater range than standard 4" ball markers
- High-reliability design lasts as long as your buried plant
- Color coded by utility application
- Patented
- Limited lifetime warranty

APPLICATION	COLOR	FREQUENCY	CAT. NO.	UPC NO.
Power	Red	169.8 kHz	0160-0001-1	60765
Water	Blue	145.7 kHz	0161-0001-1	60766
Sanitary	Green	121.6 kHz	0162-0001-1	60767
Telephone	Orange	101.4 kHz	0163-0001-1	60768
Gas	Yellow	83.0 kHz	0164-0001-1	60769
Cable TV	Orange/Black	77.0 kHz	0165-0001-1	60770
Non-Potable/Gen I	Purple	66.35 kHz	0168-0001-1	11050
EuroPower	Red/Blue	134.0 kHz	0181-0001-1	05160

**Uni Marker®**



- Electronically marks buried facilities for later relocation
- Rugged polyethylene case ensures years of useful life
- Small size and flat design attach easily to non-metallic utility box lids, hand holes and other buried enclosures
- Location is simple with any modern marker locator
- Range is 25% more than other similar-style markers
- Signal peak ensures location within inches of the marker
- Color coded by utility application
- Limited lifetime warranty

APPLICATION	COLOR	FREQUENCY	CAT NO.	UPC NO.
Power	Red	169.8kHz	0170-0001-1	60771
Water	Blue	145.7kHz	0171-0001-1	60772
Sanitary	Green	121.6kHz	0172-0001-1	60773
Telephone	Orange	101.4kHz	0173-0001-1	60774
Gas	Yellow	83.0kHz	0174-0001-1	60775
Cable TV	Orange/Black	77.0kHz	0175-0001-1	60776
Non-Potable/Gen I	Purple	66.35kHz	0178-0001-1	11059

# FIBER OPTIC TEST EQUIPMENT

## Optical Fusion Splicer



910FS

- Designed to meet virtually any FTTx installation – indoors and out. P2P installations including backhaul, cellular, and LAN
- Core alignment minimizes splice losses
- Fully compatible with Greenlee® Splice-On Connectors. 250 Splice/ Shrink cycles per battery charge

### SPECIFICATIONS

<b>Applicable Fibers</b>	SM (G.652); MM (G.651); DS (G.653); NZDS (G.655); BIF (G.657)	<b>Fiber Display Magnification</b>	240X
<b>Fiber Cleaved Length</b>	10mm	<b>Tube Heating Mode</b>	20 Preset / User Definable Modes Adjustable 0-240 seconds
<b>Cladding Diameter</b>	80 to 150µm	<b>Tube Heating Time (Typical)</b>	36 seconds
<b>Coating Diameter</b>	100 to 1000µm	<b>Attenuator Mode</b>	0.1 to 15 dB
<b>Fiber Count</b>	Single	<b>Electrode Life</b>	3,000 Splices
<b>Fiber Aligning Method</b>	Auto Core Alignment	<b>Display</b>	5.7" Color, Turn-Over LCD
<b>Splice Loss (Typical)</b>	0.02 dB (SM); 0.01 dB (MM); 0.04 dB (DS); 0.04 dB (NZDS & BIF)	<b>Connectivity</b>	RS-232; USB
<b>Splicing Mode</b>	60 Preset / User Definable Modes	<b>Operating Conditions</b>	Pressure: 0 to 16,404 feet (0 to 5,000 meters) above Sea Level Humidity: 0 to 95% Temperature: 14 to 122°F (-10 to 50°C)
<b>Splice Time (Typical)</b>	9 seconds (SM)	<b>Storage Conditions</b>	Temperature: -4 to 158°F (-20 to 70°C)
<b>Number Of Splices Per Battery Charge</b>	250 (including 60mm heat shrink cycle)	<b>Power Supply</b>	100 to 240V AC Adapter; Li-ion Battery (6600 mAh)
<b>Splice-On-Connector</b>	SC, LC, FC, ST	<b>Weight with Battery</b>	6.92 lbs (3.14 kg)
<b>Arc Calibration Mode</b>	Automatic and Manual	<b>Dimensions (HxWxD)</b>	7.08" x 6.29" x 6.10" (180 x 160 x 155 mm)
<b>Protection Sleeve Length</b>	60mm, 40mm, Micro Sleeves		
<b>Storage Of Splice Results</b>	5,000 Results		
<b>Tension Test</b>	2N		



PA1171

CAT NO.	UPC NO.	DESCRIPTION
910FS	01328	Optical Fusion Splicer
910FS-KIT1	01433	Fusion Splicer & Cleaver Kit
910FS-KIT2	01432	Contractor Fusion Splicer Kit
910FS-ELEC	01329	Replacement Electrodes
910FS-PS	01330	Replacement Power Supply
910CL	01331	Optical Fiber Cleaver
910CL-BLADE	01640	Cleaving Wheel
910FS-250	01332	250µm Adapter
910FS-900	01333	900µm Adapter
910FS-SOC-SC-LC	01335	Adapter, Splice-On Connector, SC & LC
910FS-SOC-ST-FC	02401	Adapter, Splice-On Connector, ST & FC
910FS-BATT	01452	Battery (910FS)
910FS-EUR-CORD	02571	European Line Cord
910FS-UK-CORD	02570	UK Line Cord
910FS-CHARG	02641	Battery Charger
910FS-CAR-ADAPTER	25689	12 V DC Car Adapter
PA1171	12225	ProGrip 5-in-1 Fiber Optic Stripper



## Optical Fiber Cleaver



910CL

Note: If the 910CL is purchased without a splicer. Please order either the 250um or 900um adapters or the fixed clamp.

- Accurate Cleaves. Cleave multi-mode and single-mode fiber optic cables
- Long Life. Blades rotate for longer life - over 48,000 cleaves
- Adaptable. Supports 250um, 900um fibers
- For use with the 910FS Optical Fusion Splicer for maximum speed and efficiency
- Dust bin. Safely collects end cuts during cleaving process

### SPECIFICATIONS

<b>Applicable Fibers</b>	SM (G.652); MM (G.651); DS (G.653); NZDS (G.655); BIF (G.657)
<b>Fiber Cleaved Length</b>	10mm
<b>Cladding Diameter</b>	125µm
<b>Coating Diameter</b>	0.25 mm and 0.9 mm
<b>Fiber Count</b>	Single
<b>Cleaving Angle</b>	< 1.5°
<b>Blade Life</b>	48,000 Cleaves
<b>Weight</b>	0.56 lbs (255 g)
<b>Dimensions</b>	2.29" x 2.17" x 1.89" (58 x 55 x 48 mm)

CAT. NO.	UPC NO.	DESCRIPTION
910CL	01331	Optical Fiber Cleaver
910CL-BLADE	16403	Cleaving Wheel
910C-CLAMP	31529	Fixed Clamp with Screw (910CL)
910FS	01328	Optical Fusion Splicer
910FS-250	01332	250µm Adapter
910FS-900	01333	900µm Adapter
PA1171	12225	Buffer Strippers
PA1511	10312	Kevlar Cutter

## Splice-On Connector



- Return loss: APC >60dB, UPC >55dB and MM 35dB (typical)
- 19 styles available: SM, MM, 10Gig
- Compatible with selected AFL, Sumitomo, and Fitel fusion splicers, suitable adapter may be required
- 900um boot protects splice for easy cable management
- Includes color coded 900um buffer, boot, cleave protector and extended dust cap for easy fiber identification

### SPECIFICATIONS

<b>Connector Type</b>	SM/APC	SM/UPC	MM/62.5UM	MM/50UM	MM/OM3	MM/OM4
<b>Insertion Loss (Max)</b>	0.3dB		0.4dB			
<b>Optical Return Loss</b>	>65dB	>55dB	35dB (Typical)			
<b>Ferrule Type</b>	All Zirconia Pre-Polished Ferrules					
<b>Color Code</b>	Green	White	Beige	Black	Aqua	Aqua
<b>Operating Temperature</b>	-40 to 85 degrees C					
<b>Industry Standards</b>	RoHS Compliant, Tecordia GR-326-CORE Compliant					

### COMPATIBLE FUSION SLICERS

Manufacturer	AFL	Sumitomo	Fitel	INNO	FIS		
<b>Model</b>	FSM11 (S/M)	FSM-17S	FSM-18S	Type-25e (U/S/M)	S122 (A/C/M/)	IFS10	CA3
			FSM-19S	Type-39FH	S121 (A/M)	IFS15	
			FSM-60(S/R)	Type-46	S123 (C/M)		
			FSM-70(S/R)	Type-66	S153		
				Quantum (Q101-CA)	S178A		
<b>Compatible fiberTOOLS® SOC's</b>	All Versions	SC and LC Only	SC,LC and ST Only	All Versions	All Versions	All Versions	All Versions

## Splice-On Connectors & Adapters

CAT. NO. (12 PACK)	UPC	CAT. NO. (100 PACK)	UPC	DESCRIPTION
<b>N</b> SCAPC-SOC-12	02302	SCAPC-SOC-100	02360	SC/APC Singlemode, Green 900µm Boot
<b>N</b> SCUPC-SOC-12	02303	SCUPC-SOC-100	02361	SC/UPC Singlemode, Blue 900µm Boot
<b>N</b> SC62-SOC-12	02304	SC62-SOC-100	02364	SC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
<b>N</b> SC50-SOC-12	02305	SC50-SOC-100	02365	SC/PC 50µm Multimode (OM2), Black 900µm Boot
<b>N</b> SCOM3-SOC-12	02306	SCOM3-SOC-100	02368	SC/PC 50µm Multimode (OM3), Aqua 900µm Boot
<b>N</b> SCOM4-SOC-12	02308	SCOM4-SOC-100	02371	SC/PC 50µm Multimode (OM4), Aqua 900µm Boot
<b>N</b> FCAPC-SOC-12	02313	FCAPC-SOC-100	02372	FC/APC Singlemode, Green 900µm Boot
<b>N</b> FCUPC-SOC-12	02314	FCUPC-SOC-100	02377	FC/UPC Singlemode, Blue 900µm Boot
<b>N</b> FC62-SOC-12	02316	FC62-SOC-100	02378	FC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
<b>N</b> FC50-SOC-12	02322	FC50-SOC-100	02379	FC/PC 50µm Multimode (OM2), Black 900µm Boot
<b>N</b> FCOM3-SOC-12	02323	FCOM3-SOC-100	02381	FC/PC 50µm Multimode (OM3), Aqua 900µm Boot
<b>N</b> FCOM4-SOC-12	02328	FCOM4-SOC-100	02384	FC/PC 50µm Multimode (OM4), Aqua 900µm Boot
<b>N</b> STUPC-SOC-12	02330	STUPC-SOC-100	02385	ST/UPC Singlemode, Blue 900µm Boot
<b>N</b> ST62-SOC-12	02332	ST62-SOC-100	02386	ST/PC 62.5µm Multimode (OM1), Beige 900µm Boot
<b>N</b> ST50-SOC-12	02334	ST50-SOC-100	02387	ST/PC 50µm Multimode (OM2), Black 900µm Boot
<b>N</b> STOM3-SOC-12	02335	STOM3-SOC-100	02388	ST/PC 50µm Multimode (OM3), Aqua 900µm Boot
<b>N</b> STOM4-SOC-12	02343	STOM4-SOC-100	02389	ST/PC 50µm Multimode (OM4), Aqua 900µm Boot
<b>N</b> LCAPC-SOC-12	02345	LCAPC-SOC-100	02390	LC/APC Singlemode, Green 900µm Boot
<b>N</b> LCUPC-SOC-12	02346	LCUPC-SOC-100	02395	LC/UPC Singlemode, Blue 900µm Boot
<b>N</b> LC62-SOC-12	02348	LC62-SOC-100	02397	LC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
<b>N</b> LC50-SOC-12	02351	LC50-SOC-100	02398	LC/PC 50µm Multimode (OM2), Black 900µm Boot
<b>N</b> LCOM3-SOC-12	02355	LCOM3-SOC-100	02399	LC/PC 50µm Multimode (OM3), Aqua 900µm Boot
<b>N</b> LCOM4-SOC-12	02359	LCOM4-SOC-100	02400	LC/PC 50µm Multimode (OM4), Aqua 900µm Boot

ADAPTER	UPC	DESCRIPTION
<b>R</b> AFL SOC ADAPTER	01304	AFL/Fujikura SOC Adapter
<b>R</b> FITEL SOC ADAPTER	02052	Furakawa/Fitel SOC Adapter
<b>R</b> SUMI SOC ADAPTER	02058	Sumitomo SOC Adapter
<b>R</b> INNO SOC ADAPTER	02060	Inno SOC Adapter
<b>R</b> FIS SOC ADAPTER	02062	FIS Super Cougar SOC Adapter

### 930XC Handheld Singlemode OTDR



- Up to 38 db dynamic range
- Large backlight LCD display
- Measure length and defects of coiled fiber
- Fiber analysis software for data management and report generation
- 1625 nm operation for live fiber testing
- RS-232/USB interface
- Economical
- Compact handheld design
- Easy to use
- Fast automated testing
- NiMH batteries for 8 hours continuous use

CAT. NO.	UPC NO.	DESCRIPTION
N 930XC-20C UPC SC	89882	Handheld OTDR, 1310/1550 nm, SC/UPC
N 930XC-20C UPC FC	89872	Handheld OTDR, 1310/1550 nm, FC/UPC
N 930XC-20C UPC ST	89877	Handheld OTDR, 1310/1550 nm, ST/UPC
N 930XC-20C APC SC	89892	Handheld OTDR, 1310/1550 nm, SC/APC
N 930XC-20C APC FC	89887	Handheld OTDR, 1310/1550 nm, FC/APC
N 930XC-30P UPC SC	19237	Handheld OTDR, 1310/1490/1550 nm, SC/UPC
N 930XC-30P UPC FC	19238	Handheld OTDR, 1310/1490/1550 nm, FC/UPC
N 930XC-30P UPC ST	19239	Handheld OTDR, 1310/1490/1550 nm, ST/UPC
N 930XC-30P APC SC	19240	Handheld OTDR, 1310/1490/1550 nm, SC/APC
N 930XC-30P APC FC	02618	Handheld OTDR, 1310/1490/1550 nm, FC/APC
N 930XC-30F UPC SC	19247	Handheld OTDR, 1310/1550/1625 nm, SC/UPC
N 930XC-30F UPC FC	19248	Handheld OTDR, 1310/1550/1625 nm, FC/UPC
N 930XC-30F UPC ST	02621	Handheld OTDR, 1310/1550/1625 nm, ST/UPC
N 930XC-30F APC SC	19249	Handheld OTDR, 1310/1550/1625 nm, SC/APC
N 930XC-30F APC FC	19250	Handheld OTDR, 1310/1550/1625 nm, FC/APC
A 930XC-20M PC FC	25688	Handheld OTDR, 850/1300 nm, FC/PC
A 930XC-20M PC SC	25689	Handheld OTDR, 850/1300 nm, SC/PC
A 930XC-20M PC ST	25690	Handheld OTDR, 850/1300 nm, ST/PC
R 946	60571	Cleaning Wand 10/PK
R 948	60692	REEL Cleener CONN Cleaner (948)
A 20988	20988	Soft Carrying Case
A 20989	20989	USB Cable for OTDR
A 20990	20990	RS-232 Cable
A AC-CONN-FC-L2	20996	FC Connector (for UPC & APC)
R AC-CONN-ST-L2	20997	ST Connector (for UPC only)
R AC-CONN-SC-L2	20998	SC Connector (for UPC & APC)
A AC-ADPT-20-UNIV	25691	Power Supply Universal
930XC-QR	25692	Quick Reference Guide - UN
20999	20999	NiMH Battery (9.6V)
1155-0526	10582	Car Adapter
930XC-SM-MM	02729	OTDR Kit - Single and Multimode OTDR Kit.

**SINGLEMODE SPECIFICATIONS**

Fiber Type	930XC-20C	930XC-30F	930XC-30P	930XC-20M
Wavelength (± 20nm)	1310/1550	1310/1550/1625	1310/1490/1550	800/1300
Dynamic Range (dB)	35	38	38	18/22
Event deadzone (m)	2.5	1.5	2.5	7
Attenuation Deadzone (m)	14	10	14	20
Emitter Type	Laser			LED
Pulsewidth (ns)	5, 10, 30, 100, 300, 1 us, 2.5 us, 10 us, 20 us			12/30/100/275/1us (850nm) 30/100/275/1us/2us (1300nm)
Selectable Ranges (km)	0.3/1.3/2.5/5/10/20/40/80/120/160/240			0.1/0.3/0.5/1.3/2.5/5/10 (850nm) 0.1/0.3/0.5/1.3/2.5/5/10 /20/40/80 (1300nm)
Average Time	15s/30s/1 min/2 min/3 min			
Distance measurement accuracy	±(1m + 5 X 10 <sup>-5</sup> x distance + sampling space)			
Connector Type	UPC or APC (interchangeable FC, SC, ST)			
<b>Visual Fault Locator</b>				
Wavelength	650 nm			
Peak power output	-3 dBm			
Connector interface	(interchangeable FC, SC, ST)			
<b>Fiber Analysis Software</b>				
Reflection detect accuracy	±4 dB			
Attenuation detect accuracy	±0.05 dB/dB			
Measurement data storage	1,000 test curves			
Data transmission	RS-232/USB port			
<b>General</b>				
Power Supply	NiMH chargeable battery/AC adapter			
Battery Life	Support over 8 hours operating on one charge or over 20 hours standby			
Operating Temperature	-10° to 50° C			
Storage Temperature	-20° to 60° C			
Relative Humidity	0 to 95% (non-condensing)			
Weight	1.9 lbs. (0.87 kg)			
Dimensions	7.7" H x 3.9" W x 2.4" L (196mm x 100mm x 64mm)			



## 180XL Visual Fault Locator

**NEW  
PRODUCT**



180XL

- The 180XL can be used to confirm fiber continuity on fibers up to 7km in length
- A 1.25mm adapter is available
- Has up to 80 hours of operation
- Ruggedized design - not made of plastic
- Class 2 for safe operation - 1 mW output power
- 650nm propagates more efficiently than 635nm in single mode fiber

### SPECIFICATIONS

<b>Wavelength</b>	650nm +/-10nm
<b>Output Power</b>	0dBm (1mW)
<b>Maximum Distance</b>	7km
<b>Laser Classification</b>	2
<b>Bulkhead</b>	2.5mm Universal 1.25mm adapter available
<b>Battery</b>	AA (2)
<b>Battery Life</b>	80 hours
<b>Weight</b>	120 g (not including batteries)
<b>Dimensions</b>	180mm x 15mm (diameter)

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> 180XL	84501	Visual Fault Finder

## Fiber Cleaning Pens - 1.25mm & 2.5mm

**NEW  
PRODUCT**



FCP-1.25mm



FCP-2.5mm

- Cleans 2.5mm & 1.25mm ferrules and bulkheads
- Compact, easy-to-use single click operation
- Rated for 800 cleaning cycles
- Anti-static design prevents secondary contamination

### SPECIFICATIONS

<b>Ferrule &amp; Connector Sizes</b>	1.25mm & 2.5mm
<b>Weight</b>	1 oz (20g)
<b>Dimensions</b>	7.1" x 0.7" x 0.7" (180mm x 18mm x 18mm)
<b>Working Temperature</b>	-10°C to +50°C
<b>Storage Temperature</b>	-30°C to +70°C

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> FCP-1.25	03577	1.25mm Cleaning Pen
<b>N</b> FCP-2.5	03576	2.5mm Cleaning Pen



## Optical Light Sources

**NEW PRODUCT**



GDLS 350

### SPECIFICATIONS

#### ENVIRONMENTAL

<b>Operating temperature</b>	-10 ° C to +50° C
<b>Storage temperature</b>	-30° C to +60° C
<b>Weight</b>	3 oz (85g)

- Durable and compact
- Provides a stable light source
- Interfaces to all industry standard connectors

SPECIFICATIONS	GDLS 350	GDLS 355 / GDLS 360
<b>Wavelength</b>	850nm & 1300nm LED	1310nm, 1550nm Laser/ 1490nm, 1625nm Laser
<b>Output power</b>	- 20dBm Typical	-4dBm Typical
<b>Laser Classification</b>	N/A	Class 1 (FDA 21 CFR1040.11)
<b>Output stability</b>	+/- 0.05dB, 1 hour, + /- 0.03dB long after 15 minute warm-up	
<b>Spectral Width</b>	40nm/120nm	5nm/5nm
<b>Optical interface</b>	Universal Connector Interface (FC, SC, ST & LC )	
<b>Power on</b>	Push button ON, Auto shutoff	
<b>Tone Output</b>	2kHz	
<b>Dimensions</b>	6.1 x 0.94 x 0.75in (15.5 x 2.38 x 1.90cm)	
<b>Weight</b>	3oz (85g)	
<b>Operating Temperature</b>	-10C to 50°C	
<b>Storage Temperature</b>	-30C to 60°C	

CAT. NO.	UPC NO.	DESCRIPTION
Optical Light Sources		
<b>N</b> GDLS 350	00518	850/1300 Dual LED
<b>N</b> GDLS 355	00519	1310/1550 Dual Laser
<b>N</b> GDLS 360	03203	1490nm/1625nm Dual Laser
<b>N</b> 78-0160-70	21033	Single Instrument pouch
Connector Options		
<b>R</b> GAC 022B	00440	SC Adapter for source
<b>R</b> GAC 023B	00441	FC Adapter for source
<b>R</b> GAC 024B	00442	ST Adapter for source
<b>R</b> GAC 025B	00443	LC Adapter for source

*Note: SC Adapter included with all laser and LED sources*

# Optical Power Meter

**NEW  
PRODUCT**



GRP460

- Singlemode and multimode application
- Calibrated wave lengths of 850nm, 1310nm, 1490nm, and 1550nm
- Data transfer via USB for the GRP 460
- 2kHz Tone detect
- NIST traceable
- Long Battery Life

SPECIFICATIONS	GRP 450-02 GRP 460-02	GRP 450-04 GRP 460-04
Diode	Ge	Filtered InGaAs
Wavelength range	850nm to 1625nm	
Measurement range	+ 3 to - 60dBm	+23 to -45dBm
Resolution	0.01dB	
Absolute accuracy <sup>Δ</sup>	+/- 0.25dB	
Optical interface	Universal 2.5mm (Order 1.25mm or screw on adaptors separately)	
Tone identification	2kHz Incoming signal, Audible Alert	
Power on	Push button ON, Auto shutoff	
Storage	Store up to 1000 measurements per wavelength*	
Data transfer	Mini USB Port (1000 points/wavelength)*	
Dimensions	6.1 x 0.94 x 0.75 in (15.5 x 2.38 x 1.90cm)	
Weight	3.0oz (85g)	

CAT. NO.	UPC NO.	DESCRIPTION
Optical Power Meter		
GRP 450-02	00502	Germanium, 0.01dB, Zero ref set
GRP 450-04	00505	Filtered InGaAs, 0.01dB, Zero ref set
GRP 460-02	00509	Germanium, 0.01dB, Zero/Set Ref
GRP 460-04	00511	Filtered InGaAs, 0.01dB, Zero ref set
78-0160-70	21033	Single Instrument Pouch
Connector Options:		
GAC 020	00525	2.5mm Universal Adapter
GAC 021	00526	1.25mm Universal Adaptor
GAC 026	00531	SC Adaptor for OPM
GAC 027	00532	ST Adaptor for OPM
GAC 028	00533	FC Adaptor for OPM
GAC 029	00534	LC Adaptor for OPM
GAC 126	02046	SC/APC Adaptor for OPM
GAC 540	02038	OptiTap Patchcord SC/APC for OPM
Kit Options:		
GMFT-SM	03426	<b>Single Mode Kit</b> Kit includes: 1-GDLS 355 1310/1550 Dual Laser 1-GDLS 350 850/1300 Dual LED 1-GRP 460-02 Optical Power Meter 1-Soft Carry Case
GMFT-MM	03429	<b>Multimode Kit</b> Kit includes 1- GDLS 350 850/1300 Dual LED 1- GRP 460-02 Optical Power Meter 1- Soft Carry Case
GMFT-SM-MM	03431	<b>Singlemode/Multimode Kit</b> Kit includes 1- GDLS 355 1310/1550 Dual Laser 1- GDLS 350 850/1300 Dual LED 1- GRP 460-02 Optical Power Meter 1- Soft Carry Case

## Video Inspection Scope

**NEW PRODUCT**



GVIS 300-USB

- Unique external focus mechanism eliminates need for “focus wheel”
- 3/4 μm scratch resolution
- Thin (less than 1” dia.) ergonomic probe design
- Quick change adapter tips for all connector styles
- 3.5 inch LCD Display
- Advanced Li Ion Battery & smart technology AC charger system
- Rugged and compact size

### SPECIFICATIONS

<b>FOV (Field of View)</b>	630μm x 440μm
<b>Resolution</b>	¾ micron
<b>Light Source</b>	Blue LED
<b>Lighting Technique</b>	Coaxial
<b>Display screen size</b>	3.5 in diagonal
<b>Battery Life</b>	8 to 10 hours continuous
<b>Battery charge time</b>	3 hours
<b>Size</b>	Probe – 180mm x 25mm x 19mm Monitor – 120mm x 89mm x 32mm
<b>Weight - (monitor, probe &amp; case)</b>	0.54kg
<b>Operating Temperature</b>	0° to 50 °C
<b>Storage Temperature</b>	-40°C to 70 °C

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> GVIS 300 MP-USB	00540	GVIS 300 Monitor w/USB option, Probe, SC Bulkhead and 2.5mm Universal Adaptor tips, battery charger, basic cleaning kit and hard carry case

## Video Inspection Scope

**NEW PRODUCT**



GVIS 400

- Automatic PASS/FAIL analysis equipped to meet IEC 61300-3-35 USB or Wi-Fi® streaming. Easily connects with laptops, smart phones, and tablets
- Greenlee GVIS application for analysis and reporting
- Unique external focus system and enhanced magnification produce clear high-definition images

### SPECIFICATIONS

<b>FOV (Field of View)</b>	Live - 800μm x 600μm Enlarge - 485μm x 365μm Magnify and center - 485μm x 365μm
<b>Resolution</b>	<1 micron
<b>Light Source</b>	White LED
<b>Lighting Technique</b>	Coaxial
<b>Size (Probe)</b>	Probe – 180mm x 25mm x 19mm
<b>Weight - (Probe)</b>	102 g
<b>Operating Temperature</b>	0° to 50 °C
<b>Storage Temperature</b>	-40°C to 70 °C

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> GVIS 400-HDP	03178	GVIS 400 Probe Auto Pass/Fail with USB

## Video Inspection Scope

**NEW  
PRODUCT**



GPAD-250

- Industry leading field of view
- Transmits live images and data via Wi-Fi from the GVIS 400-HDP via GPAD 250 USB
- PASS/FAIL via GPAD 250 conforming to IEC 61300-3-35
- Compatible with Greenlee inSpec and OpTest apps for Android
- Wireless transmission of dB loss readings from the GRP 460

### SPECIFICATIONS

<b>Dimensions</b>	4.5"L x 1.5"W x 2.75"H (114 mm x 38 mm x 70 mm)
<b>Weight</b>	0.5 lbs (23 kg)
<b>Wi-Fi Connectivity</b>	802.11 abgn Wi-Fi Access Point
<b>Battery</b>	11.1 volt lithium ion, 4 hour battery life
<b>Battery Charger</b>	AC Wall pack 12.6 volt lithium ion charger
<b>Communication Distance</b>	200 feet / 61 meters (GPAD 250 to wireless device)

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> GPAD-250	03179	Wi-Fi Portable Access Device - For use with the GVIS-400 HDP

## Video Inspection Scope Adapter Tips



GAC 040B



GAC 044B



GAC 048B

CAT. NO.	UPC NO.	DESCRIPTION
<b>R</b> GAC 034B	03180	E2000 Adapter GVIS
<b>R</b> GAC 040B	03181	SC Adapter GVIS
<b>R</b> GAC 041B	03182	SC/APC Adapter GVIS
<b>R</b> GAC 042B	03183	FC Adapter GVIS
<b>R</b> GAC 043B	03184	FC/APC Adapter GVIS
<b>R</b> GAC 044B	03187	LC Adapter GVIS
<b>R</b> GAC 045B	03188	LC/APC Adapter GVIS
<b>R</b> GAC 046B	03189	ST Adapter GVIS
<b>R</b> GAC 047B	03192	MTP/APC Adapter GVIS
<b>R</b> GAC 048B	03190	1.25mm Universal Adapter GVIS
<b>R</b> GAC 049B	03191	2.5mm Universal Adapter GVIS
<b>R</b> GAC 050B	03193	MTP Straight Adapter GVIS
<b>R</b> GAC 052B	01896	OptiTap SC/APC Adapter for GVIS
<b>R</b> GAC 104B	03199	FC Adapter, 60-Degree Angled GVIS
<b>R</b> GAC 107B	03202	SC Adapter, 60-Degree Angled GVIS
<b>R</b> GAC 109B	03200	LC Adapter, 60-Degree Angle GVIS
<b>R</b> GAC 115B	02050	2.5mm APC Adapter for GVIS
<b>R</b> GAC 116B	02051	1.25mm APC Adapter for GVIS

## SensoLITE® Light Detector



510XL

Promotes workplace safety – can help prevent accidental eye exposure to hazardous laser radiation when used as directed

### SPECIFICATIONS

#### ENVIRONMENTAL

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-25° C to +70° C
<b>Humidity</b>	0 to 90% RH, non-condensing
<b>Dimensions</b>	14.2 x 4.3 x 3.3 cm (5.6 x 1.7 x 1.3 in.)
<b>Weight</b>	120 g (4.2 oz.) with batteries

- Detects visible and invisible light wavelengths (630 nm to 1600 nm)
- Saves time and eliminates guesswork
- Simple, durable, and easy to use
- Works with bare and connectorized fibers
- Accepts all fiber and most connector types
- Wide sensitivity range: from -55 dBm to +25 dBm
- Presence of light indicated by an audible signal and an illuminated front panel LED
- Unique design permits testing in bright ambient light conditions
- Long battery life—up to one year of normal use
- Low battery indicator
- Replaceable light blocking curtain

### SPECIFICATIONS

#### OPTICAL

<b>Center Wavelength</b>	630 nm to 1600 nm
<b>Detector</b>	PIN-type germanium
<b>Optical Interface</b>	Direct connection to bare or connectorized fibers; No specialized adapters required
<b>Sensitivity</b>	
<b>630nm</b>	< -40 dBm
<b>850nm</b>	< -55 dBm
<b>1300nm</b>	< -55 dBm
<b>1550nm</b>	< -55 dBm
<b>Output Indicators</b>	
<b>Light &gt; -40dBm</b>	Amber LED/audible signal
<b>Battery test</b>	Green LED
<b>Power Requirements</b>	Two AA size 1.5V batteries (approx. 100 hours continuous operation)

CAT. NO.	UPC NO.	DESCRIPTION
510XL	00024	Visual Fault Finder



## Fiber Optic Power Meter



560XL

### SPECIFICATIONS

#### Environmental

Operating temperature	-15° C to +55° C
Storage temperature	-35° C to +70° C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
Weight	241 g (8.5 oz.)
CE	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

- Easy to use - three buttons control all functions
- Loss measurements in (dB); power measurements in (dBm).
- 0.01 dB measurement resolution
- Multi-wavelength storage - store and recall reference power levels for faster, more efficient measurements
- Snap-On connector interface adapts to FC, SC and ST connectors.
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
----------	---------	-------------

560XL	84485	Fiber Optic Power Meter
A T1062	60575	SC/PC UCI Adapter
A T1020	60576	FC/PC SOC Adapter
A T1030	60577	ST/PC SOC Adapter

### SPECIFICATIONS

#### OPTICAL

Calibration Wavelengths	850 nm, 1300 nm, 1310 nm and 1550 nm
Power Range	+3 dBm to -60 dBm
Accuracy	± 0.25 dB
Linearity	
+3dBm to -3dBm	±0.5 dB
-3dBm to -50dBm	±0.5 dB
-50dBm to -60dBm	±0.5 dB
Resolution	0.01 dB
Power Requirements	Two AA size 1.5V batteries (approx. 100 hours continuous operation)
Connector interface	FC, SC or ST SOC Adapter

## Silicon Fiber Optic Power Meter



567XL

### SPECIFICATIONS

#### Environmental

Operating temperature	-15° C to +55° C
Storage temperature	-35° C to +70° C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
Weight	241 g (8.5 oz.)
CE	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

- Easy to use - three buttons control all functions
- Loss measurements in (dB); power measurements in (dBm)
- 0.01 dB measurement resolution
- Snap on connector interface adapts to FC, SC and ST connectors. Contact Greenlee for other available adapters.
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
----------	---------	-------------

567XL	00025	XL fiberTOOLS® - Silicon Fiber Optic Power Meter
-------	-------	--

### SPECIFICATIONS

#### OPTICAL

Detector Type	3 x 3.5 mm Silicon
Calibration Wavelengths	635 nm, 780 nm, and 850 nm
Power Range	+3 dBm to -60 dBm
Accuracy	±0.25 dB
Linearity at:	
+3 dBm to -3 dBm	±0.5 db
-3 dBm to -50 dBm	±0.05 db
-50 dBm to -60 dBm	±0.5 db
Resolution	0.01 dB
Power Requirements	Two AA size 1.5V batteries (approx. 100 hours continuous operation)
Connector Interface	SOC

## High Intensity Fiber Optic Power Meter



568XL

- Easy to use - three buttons control all functions
- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors; Contact Greenlee for other available adapters
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
568XL	00026	XL fiberTOOLS® - High Intensity Optic Power Meter

### SPECIFICATIONS

#### Environmental

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-35° C to +70° C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
<b>Weight</b>	241 g (8.5 oz.)
<b>CE</b>	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

### SPECIFICATIONS

#### OPTICAL

<b>Detector Type</b>	2 mm indium-arsenide (InGaAs)	
<b>Calibration Wavelengths</b>	980 nm, 1310 nm, and 1550 nm	
<b>Power Range</b>	+25 to -30 dBm (1310 nm and 1550 nm); +25 to -27 dBm measurement range at 980 nm. To avoid thermal damage, limit exposure high power (greater than +23 dBm) to less than 30 minutes.; +25 to -27 dBm (980 nm only)	
<b>Linearity at (1310nm and 1550nm)</b>	+25 dBm to +22 dBm	±1.0 dB
	+22 dBm to +18 dBm	±0.5 dB
	+18 dBm to +10 dBm	±0.2 dB
	+10 dBm to -30 dBm	±0.05 dB
<b>Absolute Accuracy</b>	±0.25dB at calibration conditions	
<b>Wavelength Dependence</b>	975 to 985 nm	0.025 dB/nm
	1270 to 1330 nm	0.0033 dB/nm
	1500 to 1625 nm	0.0016 dB/nm
<b>Polarization Dependence</b>	<0.1 dB	
<b>Resolution</b>	±0.01 dB	
<b>Power Requirements</b>	Two AA size 1.5V batteries (approx. 100 hours continuous operation)	
<b>Connector Interface</b>	SOC	

## 850/1300 nm LED Source



570XL-FC

### SPECIFICATIONS

#### ENVIRONMENTAL

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-35° C to +70° C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
<b>Weight</b>	241 g (8.5 oz.)
<b>CE</b>	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

- 850/1300 nm wavelengths
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Fixed connector interface FC, SC or ST
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
570XL-FC	84486	850/1300 nm LED source w/FC interface
570XL-SC	84487	850/1300 nm LED source w/SC interface
570XL-ST	84488	850/1300 nm LED source w/ST interface

### SPECIFICATIONS

#### OPTICAL

<b>Center Wavelengths</b>	850 nm	1300 nm
<b>Range (typical)</b>	840 nm to 880 nm	1270 nm to 1345 nm
<b>Max. spectral width</b>	60 nm	150 nm
<b>Stability (1 hour)</b>	±0.05 dB	±0.05 dB
<b>Typical power output</b>		
<b>100/140um</b>	-20 dBm	-20 dBm
<b>62.5/125um</b>	-21 dBm	-20 dBm
<b>50/125um</b>	-121dBm	-21 dBm
<b>Modulation frequency</b>	270 kHz, 1 kHz and 2 kHz	270 kHz, 1 kHz and 2 kHz
<b>Power Requirements</b>	Two AA size 1.5V batteries	Two AA size 1.5V batteries
<b>(approx. 40 hours continuous operation)</b>		
<b>Connector interface</b>	FC, SC or ST	FC, SC or ST

## 650 nm LED Source for Large Core Plastic and Glass Fiber



573XL-ST

### SPECIFICATIONS

#### ENVIRONMENTAL

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-35° C to +70° C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
<b>Weight</b>	241 g (8.5 oz.)
<b>CE</b>	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

- 650 nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- ST connector interface
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
573XL-ST	00023	650NM LED source w/ST interface
573XL-UNIV	00598	650NM LED source w/UCI interface

### SPECIFICATIONS

#### OPTICAL

<b>Center Wavelength</b>	650 nm
<b>Range (Typical)</b>	630 nm to 670 nm
<b>Max. Spectral Width (FWHM)</b>	40 nm
<b>Stability (1 hour)</b>	±0.05 dB
<b>Power Output into</b>	-15 dBm ±0.5 dB
<b>MM 200/300 SI Fiber</b>	
<b>Modular Frequencies</b>	270 kHz, 1 kHz and 2 kHz ±0.5 dB
<b>Power Requirements</b>	Two AA size 1.5V batteries
<b>(approx. 24 hours continuous operation)</b>	
<b>Connector Interface</b>	ST

## 850 nm LED Source with AS-100 Launch Condition using 100/140 Fiber



577XL AS100

- 850 nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Universal connector interface
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
577XL AS100	00029	850 nm LED source w/AS100 Launch
<b>A</b> APC-108	60572	FC/PC UCI Adapter
<b>A</b> ATS-108	60573	ST/PC UCI Adapter
<b>A</b> ASC-108	60574	SC/PC UCI Adapter

### SPECIFICATIONS

#### SPECIFICATIONS

##### ENVIRONMENTAL

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-35° C to +70° C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
<b>Weight</b>	241 g (8.5 oz.)
<b>CE</b>	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

##### OPTICAL

<b>Center Wavelength</b>	850 nm
<b>Range (Typical)</b>	840 nm to 880 nm
<b>Max. Spectral Width (FWHM)</b>	<55 nm
<b>Stability (1 hour)</b>	±0.05 dB
<b>Launch Profile</b>	AS100
<b>Power Output into MM 100/140 GI fiber</b>	-13 dBm ±0.5 dB
<b>Modular Frequencies</b>	270 kHz, 1 kHz and 2 kHz ±5%
<b>Power Requirements</b>	Two AA size 1.5V batteries (approx. 24 hours continuous operation)
<b>Connector Interface</b>	Universal connector interface, physical contact (UCI-PC)

## 1300 nm LED Source with M90 Launch Condition using 62.5/1.25 Fiber

### SPECIFICATIONS

##### ENVIRONMENTAL

<b>Operating temperature</b>	-15° C to +55° C
<b>Storage temperature</b>	-35° C to +70° C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
<b>Weight</b>	241g (8.5 oz.)
<b>CE</b>	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

#### SPECIFICATIONS

##### OPTICAL

<b>Center Wavelength</b>	1300 nm
<b>Range (Typical)</b>	150 nm
<b>Max. Spectral Width (FWHM)</b>	<55 nm
<b>Stability (1 hour)</b>	±0.05 dB
<b>Launch Profile</b>	M90
<b>Power Output into MM 62.5/125 GI fiber</b>	-20 dBm
<b>Modular Frequencies</b>	270 kHz, 1 kHz and 2 kHz ±5%
<b>Power Requirements</b>	Two AA size 1.5V batteries (approx. 24 hours continuous operation)
<b>Connector Interface</b>	Universal connector interface, physical contact (UCI-PC)

- 850 nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Universal connector interface
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
578XL-M90	00753	LED Source 1300 NM, 62.5/1.25 Fiber
<b>A</b> APC-108	60572	FC/PC UCI Adapter
<b>A</b> ATS-108	60573	ST/PC UCI Adapter
<b>A</b> ASC-108	60574	SC/PC UCI Adapter

### 1310/1550 nm Laser Source



580XL-FC

- 1310/1550nm wavelengths
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Fixed connect interface FC, SC or ST
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

CAT. NO.	UPC NO.	DESCRIPTION
580XL-FC	84489	1310/1550nm Laser source w/FC interface
580XL-SC	84490	1310/1550nm Laser source w/SC interface
580XL-ST	84491	1310/1550nm Laser source w/ST interface

#### SPECIFICATIONS

##### ENVIRONMENTAL

Operating temperature	-15° C to +55° C
Storage temperature	-35° C to +70° C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
Weight	241 g (8.5 oz.)
CE	EN61010; EN50081-1: 1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4
CDRH Laser Class	Class 1

#### SPECIFICATIONS

##### OPTICAL

Center Wavelengths	1310 nm	1550 nm
Range (typical)	1280 nm to 1340 nm	1520 nm to 1580 nm
Max. spectral width	<5 nm	<5 nm
Stability (1 hour)	±0.05 dB	±0.05 dB
Typical power output (9/125)		
Minimum	-8 dBm	-8 dBm
Typical	-7 dBm	-7 dBm
Modulation frequency	270 kHz, 1 kHz and 2 kHz	270 kHz, 1 kHz and 2 kHz
Power Requirements	Two AA size 1.5V batteries	Two AA size 1.5V batteries
(approx. 40 hours continuous operation)		
Connector interface	FC, SC or ST	FC, SC or ST

### Multimode Fiber Optic Test Set



5670-FL

- Insertion loss test set for multimode fiber
- 850/1300 nm loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy to use portable package
- Economically priced

#### SPECIFICATIONS

##### 5670-FC INCLUDES:

- 560XL Optical Power Meter
- 570XL-FC 850/1300 nm LED Source w/FC Connector
- T1020 FC/PC SOC Adapter
- 914B Carrying Case

##### 5670-SC INCLUDES:

- 560XL Optical Power Meter
- 570XL-SC 850/1300 nm LED Source w/SC Connector
- SC/PC SOC Adapter
- 914B Carrying Case

##### 5670-ST INCLUDES:

- 560XL Optical Power Meter
- 570XL-ST 850/1300 nm LED Source w/ST Connector
- T1030 ST/PC SOC Adapter
- 914B Carrying Case

CAT. NO.	UPC NO.	DESCRIPTION
5670-FC	84492	Multimode Fiber Optic Test Set w/FC interface
5670-SC	84493	Multimode Fiber Optic Test Set w/SC interface
5670-ST	84494	Multimode Fiber Optic Test Set w/ST interface



## Singlemode Fiber Optic Test Set



5680-FC

- Insertion loss test set for singlemode fiber
- 1310/1550 nm loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy to use portable package
- Economically priced

### KIT SPECIFICATIONS

#### 5680-FC INCLUDES:

- 560XL Optical Power Meter
- 580XL-FC 1310/1550 nm Laser Source w/FC Connector
- T1020 FC/PC SOC Adapter
- 914B Carrying Case

#### 5680-SC INCLUDES:

- 560XL Optical Power Meter
- 580XL-SC 1310/1550 nm Laser Source w/SC Connector
- T1062 SC/PC SOC Adapter
- 914B Carrying Case

#### 5680-ST INCLUDES:

- 560XL Optical Power Meter
- 580XL-ST 1310/1550 nm Laser Source w/ST Connector
- T1030 ST/PC SOC Adapter
- 914B Carrying Case

CAT. NO.	UPC NO.	DESCRIPTION
5680-FC	84495	Singlemode Fiber Optic Test Set w/FC interface
5680-SC	84496	Singlemode Fiber Optic Test Set w/SC interface
5680-ST	84497	Singlemode Fiber Optic Test Set w/ST interface

## Multimode and Singlemode Fiber Optic Test Set



5890-FC

- Insertion loss test set for multimode and singlemode fiber
- 850/1300 nm Loss measurements
- 1310/1550 nm Loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy to use portable package
- Economically priced

### KIT SPECIFICATIONS

#### 5890-FC INCLUDES:

- 560XL Optical Power Meter
- 570XL-FC 850/1300 nm LED Source w/FC Connector
- 580XL-FC 1310/1550 nm Laser Source w/FC Connector
- T1020 FC/PC SOC Adapter
- 915B Carrying Case

#### 5890-SC INCLUDES:

- 560XL Optical Power Meter
- 570XL-SC 850/1300 nm LED Source w/SC Connector
- 580XL-SC 1310/1550 nm Laser Source w/SC Connector
- T1062 SC/PC SOC Adapter
- 915B Carrying Case

#### 5890-ST INCLUDES:

- 560XL Optical Power Meter
- 570XL-ST 850/1300 nm LED Source w/ST Connector
- 580XL-ST 1310/1550 nm Laser Source w/ST Connector
- T1030 ST/PC SOC Adapter
- 915B Carrying Case

CAT. NO.	UPC NO.	DESCRIPTION
5890-FC	84498	Multimode and Singlemode Fiber Optic Test Set w/FC interface
5890-SC	84499	Multimode and Singlemode Fiber Optic Test Set w/SC interface
5890-ST	84500	Multimode and Singlemode Fiber Optic Test Set w/ST interface

## 525N-30 Smart Optical Loss Test Set

525N-30-FC



- Automated dual cable testing
- Optical return loss measurements
- Dual wavelength insertion loss measurements
- Multi-mode and Single-mode models feature user settable PASS/FAIL thresholds
- Communications between units via messaging
- Wide dynamic range optical power meter
- Test record storage and data management software
- Rugged outside plant instrument package
- Universal connector interface

CAT. NO.	UPC NO.	DESCRIPTION
525N-30-FC	00891	850/1300nm Smart Optical Loss Test Set - FC interface
525N-30-SC	00892	850/1300nm Smart Optical Loss Test Set - SC interface
525N-30-ST	00893	850/1300nm Smart Optical Loss Test Set - ST interface

### SPECIFICATIONS

### 525N-30-XX

Instrument Type	Singlemode Smart Loss Test Set
Interface Connector	PC Connector Interface AUTOTEST performs
AUTOTEST measurements	Insertion Loss Test and Manual Return Loss

### POWER METER

Detector Type	InGaAs
Display Range	+10 dBm to -70 dBm
Calibrated Wavelengths	850, 980, 1300, 1310, 1550, 1480, 1625 nm
Absolute Accuracy	<±0.25 dB
Resolution	0.01 dB
Measurement Units	dBm, dB

### SOURCE SPECIFICATIONS

Center Wavelength	850 nm ±30 nm	1300 nm ±30 nm
Spectral Width	<170	<170
Output Power	>-21 dBm	>-21 dBm
Output Stability	<±0.10 dB/8 hrs	<±0.10 dB/8 hrs

### AUTOTEST INSERTION LOSS SPECIFICATIONS

Test Port Measurement Range	25 dB
Calibrated Wavelengths	850, 1300 nm

### GENERAL DESCRIPTIONS

Display Type	Graphics Liquid Crystal with Backlight
Fiber Type	Singlemode 9/125 um
Standard Adapter Type	FC, SC, ST other adapter options available
Laser Classification	Class 1 CFR 1040
Operating Temperature	0° C to +50° C
Storage Temperature	-20° C to +60° C
Relative Humidity	0 to 95% RH non-condensing
Size	19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)
Weight	1.0 kg (2.2 lbs)
Power	Internal rechargeable NiMH
Battery Life	>8 hours

## 525N-60 Smart Optical Loss Test Set



- Automated bi-directional testing
- Optical return loss measurements
- Dual wavelength insertion loss measurements
- Multi-mode and single-mode models feature user settable PASS/FAIL thresholds
- Communications between units via messaging
- Wide dynamic range optical power meter
- Test record storage and data management software
- Rugged outside plant instrument package
- Universal connector interface

CAT. NO.	UPC NO.	DESCRIPTION
525N-60-ST	00896	1310/1550 nm Smart Optical Loss Test Set - PC Connectors
525N-60-FC	00894	1310/1550 nm Smart Optical Loss Test Set - PC Connectors
525N-60-SC	00895	1310/1550 nm Smart Optical Loss Test Set - PC Connectors

### SPECIFICATIONS

### 525N-60-XX

Instrument Type	Singlemode Smart Loss Test Set
Interface	PC Connector Interface AUTOTEST
Connector	performs
AUTOTEST measurements	Insertion Loss Test and Manual Return Loss

### POWER METER SPECIFICATIONS

Detector Type	InGaAs
Display Range	+10 dBm to -70 dBm
Calibrated Wavelengths	850, 980, 1300, 1310, 1550, 1480, 1625
Absolute Accuracy	±0.25 dB
Resolution	0.01 dB
Measurement Units	dBm, dB, W
Adapter Type	UCI-UPC flat polish adapter 9/125SM

### SOURCE SPECIFICATIONS

Center Wavelength	1310 nm ±30 nm	1550 nm ±30 nm
Spectral Width	<5	<5
Output Power	>-10 dBm	>-10 dBm
Output Stability	±0.15 dB	±0.15 dB
	8 hours	8 hours

### AUTOTEST INSERTION LOSS SPECIFICATIONS

Test Port Measurement Range	40 dB
Calibrated Wavelengths	1310, 1550 nm

### RETURN LOSS SPECIFICATIONS

Measurement Range	10 to 45 dB
Accuracy	.5 dB

### GENERAL DESCRIPTIONS

Display Type	Graphics Liquid Crystal with Backlight
Fiber Type	Singlemode 9/125 um
Standard Adapter Type	FC, SC, ST other adapter options available
Laser Classification	Class 1 CFR 1040
Operating Temperature	0° C to +50° C
Storage Temperature	-20° C to +60° C
Relative Humidity	0 to 95% RH non-condensing
Size	19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)
Weight	1.0 kg (2.2 lbs)
Power	Internal rechargeable NiMH
Battery Life	>8 hours

## Connector Cleaning Systems

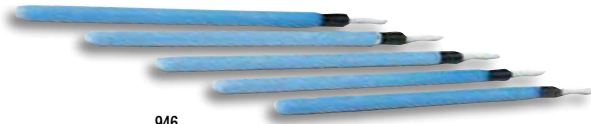


948

- Special lint-free fabric-on-a-reel quickly cleans ferrule endfaces of dust, oil and other contaminants
- Cleaning system is completely self-contained
- No need for alcohol
- A single cleaning reel can be used for over 400 ferrule cleanings
- ReelCleaner™ can be used on all connector types including MTP and MT-RJ

CAT. NO.	UPC NO.	DESCRIPTION
948	60692	ReelCleaner™ Connector Cleaning System
 948/2	10792	Reel Set, 2/Package
 945/ESD/1	24053	Reel Set, 1/Package

## Adapter Cleaning Wands



946

- Specially-created, lint-free materials clean hard-to-reach fiber optic interfaces, bulkhead adapters and ferrule alignment sleeves

CAT. NO.	UPC NO.	DESCRIPTION
946	60571	2.5 mm Cleaning Wands, 10/Package
946/K	60689	2.5 mm Cleaning Wands, 200/Box
947	60690	1.25 mm Cleaning Wands, 10/Package
947/K	60691	1.25 mm Cleaning Wands, 200/Box

## Optical Fiber Monitors



OFM1020



OFM130

### OFM1020

- mm Resolution
- Zero Deadzone
- 90dB Return loss dynamic range
- 850/1300 nm operation
- Measure optical components, cables and sensors.
- Monitor bend loss and fiber stress
- Universal optical interface
- Ruggedized for field deployment
- AC/DC operation
- Custom configurations available (fiber, outputs, wavelengths)

### OFM130

- mm Resolution
- Zero Deadzone
- 85dB Return loss dynamic range
- 1310/1490/1550/1625 nm operation
- Measure optical components, cables and sensors
- Analyze optical amplifiers
- Monitor bend loss and fiber stress
- Custom configurations available (fiber, outputs, wavelengths)

CAT. NO.	UPC NO.	DESCRIPTION
----------	---------	-------------

**Please consult with a customer service representative for ordering details. (800) 642-2155**

### SPECIFICATIONS







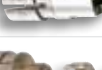
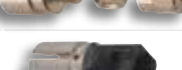






Fiber Type	OFM1020	OFM130
<b>Distance</b>		
Range	0-20 km (65,000 ft.)	
Accuracy	0.02% + 2.5cm (1")	
Single Point Resolution	5 mm (0.2")	
Two Point Resolution	10 cm (4")	
<b>Deadzone</b>		
Event	12 cm typical (5")	
Attenuation	38 cm typical (15")	
<b>Return Loss</b>		
Dynamic Range	90dB	
Accuracy	±1.0dB	
<b>Insertion loss, fresnel</b>		
Dynamic Range	40dB	
Accuracy	±0.3dB	
<b>Insertion loss, rayleigh</b>		
Dynamic Range	20dB	
Accuracy	±0.02 dB	
<b>Wavelength</b>		
Accuracy	40 nm	
Spectral Width	20 nm	
<b>Mechanical</b>		
Size	36 cm x 48 cm x 20 cm (14.2"x18.9"x7.9")	35 cm x 39 cm x 20 cm (13.8"x15.3"x7.9")
Weight	11 kg (24 lb.)	9.5 kg (21 lb.)
<b>Power</b>		
AC	110/220V, 60/400Hz	
DC	24V	n/a



### Fiber Optic Instrument Adapters – SOC and UCI

- Our SOC and UCI adapters provide direct connectivity for Tempo fiberTOOLS® to a wide range of industry-standard fiber optic connectors
- Adapter design ensures maximum accuracy and repeatability when performing critical measurements on fiber optic systems
- Easy to clean and use
- Single-mode and multimode compatible
- SOC adapters are compatible with both PC and Angled APC physical contact interfaces
- UCI adapters feature durable phosphor bronze alignment sleeve
- SOC (Snap-On Connector) adapter is used on all power meters and 250 “B” series LED Sources
- UCI (Universal Connector Interface) adapter is used on all 250/260 “A” Series Sources and 330 Series Variable Optical Attenuators

### Fiber Optic Instrument Adapters – SOC and UCI

CONNECTOR TYPE DESCRIPTION	SOC ADAPTER		UCI ADAPTER		
	CAT. NO.	UPC NO.		CAT. NO.	UPC NO.
1.25 mm Quick-Connect Universal Adapter (LC, MU, etc.)		T1026	60588	Use Hybrid Cable Only *	
2.5 mm SOC Quick-Connect Adapter (E2000, FC, SC, ST, etc.)		T1025	60587		AU-250 60703
E-2000		T10E2	60599		AE2-10 60698
FC		T1020	60576		APC-108 60572
HMS-10/HP		T1040	60590		AHP-10 60699
LC		T10LC	60600	Use Hybrid Cable * or FoPro®-x	
MIL-T-29504/4 & /5 Termini		T1038	60589	Use Hybrid Cable * or FoPro®-x	
MT-RJ		T13A2	60605	Use Hybrid Cable Only *	
SC		T1062	60575		ASC-108 60574
SMA 905/906		T1087	60596		ASM-90 60702
ST		T1030	60577		ATS-108 60573
TOSLINK – Simplex		T10TB	60602	Use Hybrid Cable Only *	
Versatile Link – V/Z PIN		T10ZP	60604	Use Hybrid Cable Only*	

\* FoPro ferrule options include 2.5 mm, 1.57 mm (MIL-style 16AWG optical contacts) and 1.25 mm.  
 \* When using a Hybrid Adapter Cable, the instrument UCI adapter and one end of the Hybrid Adapter Cable should be a commonly available connector type. (i.e. FC, SC or ST)



**90SOC (60687)**  
 SOC adapter tool for easy installation and removal of SOC adapters from instrument interfaces. (Product shown may vary)

# FIBER OPTIC HAND TOOLS

## ProGrip 5-in-1 Fiber Optic Stripper



PA1171

- Precision ground stripping cavities for:
  - 2.0 - 2.4 mm outer jacket
  - 2.0 - 3.0 mm loose tube
  - 2.8 - 3.0 mm outer jacket
  - 900 µm buffer insulation
  - 900/125 µm and 250/125 µm buffer/acrylate
- Factory calibrated

CAT. NO.	DESCRIPTION
PA1171	ProGrip 5-in-1 Fiber Optic Stripper

## ProGrip 3-in-1 Fiber Optic Stripper



PA1177

- Precision ground stripping cavities for:
  - 2.0 mm outer jacket
  - 900 µm buffer insulation
  - 250 µm buffer/acrylate
- Factory calibrated

CAT. NO.	DESCRIPTION
PA1177	ProGrip 3-in-1 Fiber Optic Stripper

## Economy Kevlar® Cutter



PA1511

- Cut protective Kevlar strands in fiber optic cable
- Hard-chromed serrated edges to easily cut through Kevlar
- Comfortable handles with large finger openings
- 7.75" (197 mm) long

CAT. NO.	DESCRIPTION	WEIGHT
PA1511	Economy Kevlar Cutter	2 oz

*Kevlar is a registered trademark of E.I. DuPont, Inc.*

## Economy Fiber Optic Stripper



PA1162

- Pre-calibrated and factory set to ensure precision
- Bright orange rubber dipped handles
- Lock closure for safety and transport
- Tool is for stripping 2.0-3.0 mm Fiber Optic cable, micron-cladded core
- 5" (127 mm) long

### SPECIFICATIONS

Weight	3 oz. (86 g)
Length	5" (127 mm)

CAT. NO.	DESCRIPTION	WEIGHT
PA1162	Economy Fiber Optic Stripper	3 oz

### Pocket Cable Stripper



1903

- Specifically designed for stripping power and telecommunications cables from 3/4" to 1-1/2" in diameter (19 mm to 40 mm)
- Strips solid conductor, stranded conductor and multiple conductor cables
- Easy blade depth adjustment
- Blade rotates for circular, longitudinal and spiral cuts.

CAT. NO.	UPC NO.	DESCRIPTION
1903	12679	Cable Stripping Tool
13544	13544	Replacement Blade (2 per package)
13545	13545	Replacement Small Hook
13546	13546	Replacement Large Hook

### Fiber Optic Scribe



PA1922-1

- Pen-type scribe with screw-in non-reversible carbide tip
- Wedge shaped tip
- Pocket-clip
- Stainless steel barrel
- 5.25" (197 mm)

CAT. NO.	DESCRIPTION	WEIGHT
PA1922-1	Fiber Optic Scribe	2 oz

### Fiber Optic Polishing Pucks



PA1920-1

- Manufactured from aluminum with tungsten coating
- Cleaner than conventional plastic pucks because less debris left behind
- Double the lifetime of conventional plastic pucks
- Length: 7.75" (197 mm)

CAT. NO.	DESCRIPTION	WEIGHT
PA1920-1	SC, ST, FC Polishing Puck	2 oz
PA1926-1	LC Polishing Puck	2 oz

# FIBER OPTIC KITS

## Ultimate Fiber Tool Kit



This Ultimate Kit contains all the slitters, strippers, and Kevlar® cutters you will need to start your fiber optic terminations. Also included is the premium 1600 Series Crimper with three interchangeable dies. The Ultimate Tool Bag also has plenty of room for you to add your consumables

CAT. NO.	DESCRIPTION	WEIGHT
PA4924	Ultimate Fiber Tool Kit	5.65 lbs

### ULTIMATE FIBER TOOL KIT INCLUDES

- R** PA1511 Kevlar® Cutter
- R** PA1171 ProGrip 5-in-1 Fiber Optic Stripper
- R** PA1162 Economy Fiber Optic Stripper
- R** PA1161 Adjustable Jacket Stripper
- R** PA1820 AM 25 Slitter
- R** PA1821 AM 35 Slitter
- R** PA1258 LC CST- Mini Stripper
- R** PA1600 1600 Series Crimp Frame
- R** PA2044 STII Type Die Set
- R** PA2664 SMA/SMB/FC/BICONIC Die Set
- R** PA1922-1 Fiber Optic Scribe
- R** PA1920-1 SC/ST/FC Polishing Puck
- R** PA1926-1 LC Polishing Puck
- R** N/A Plano® Tackle Box
- R** PA4923 Ultimate Tool Bag

*Kevlar is a registered trademark of E.I. DuPont, Inc.*

## FiberReady Tool Kit



This kit contains an assortment of cable slitters, strippers and Kevlar® cutters to prep fiber optic cable along with our 1600 Series premium crimper with interchangeable dies

CAT. NO.	DESCRIPTION	WEIGHT
PA906001	FiberReady Tool Kit	3.1 lbs

### FIBERREADY TOOL KIT INCLUDES

- R** PA1511 Kevlar® Cutter
- R** PA1171 ProGrip 5-in-1 Fiber Optic Stripper
- R** PA1822 Universal Cable Stripper
- R** PA1600 1600 Series Crimp Frame
- R** PA2044 STII Type Die Set
- R** PA2664 SMA/SMB/FC/BICONIC Die Set
- N/A Zippered Portfolio Case with Handles

*Kevlar is a registered trademark of E.I. DuPont, Inc.*

# COMMUNICATIONS KITS

## GripPack Quick-Release Tool Holster



PA4942

- Easy-on, easy off with new quick-release belt clip
- Belt clip swivels so the holster moves with you and the tools stay out of your way
- Form fitted PVC material ensures that tools don't fall out - even if you drop your kit or they are upside down
- Molded specifically to hold the following Greenlee Communications Tools: Data SureStrip® UTP/STP & flat satin phone cutter/stripper, Datacomm scissors with serrated blades & ergonomic handles, Punchdown tool - either the ergonomic SurePunch Pro or the original SurePunch PDT®, Mini-MagLite® or SurePunch Pro detachable LED, and a Sharpie® marker

CAT. NO.	DESCRIPTION
PA4940	GripPack Quick-Release Tool Holster
PA4941	GripPack SurePunch Pro Technician's Kit
PA4942	GripPack SurePunch Pro Installer's Kit
PA4943	GripPack SurePunch Technician's Kit
PA4946	GripPack UTP Essentials
PA4940-31	Replacement Belt Clip

## Grip Pack Kits



DESCRIPTION	MODEL	PA4941	PA4942	PA4943	PA4946
GripPack Tool Holster	PA4940	✓	✓	✓	
Data SureStrip® UTP/STP & flat satin cutter/stripper	PA1116	✓	✓	✓	✓
Reversible 110/66 blade	PA4571	✓	✓	✓	✓
SurePunch Pro PDT punchdown tool handle	PA3589	✓	✓		
SurePunch PDT® punchdown tool handle	PA3570			✓	✓
SurePunch Pro detachable LED light & batteries	PA4599	✓	✓		
MagLite® with 2 AA batteries	N/A	✓		✓	
Black Sharpie® pen	N/A	✓		✓	

## Pro COAX Tool Kit

46601



Designed for the professional CATV cable installer. Offers the convenience in having six essential tools needed for coaxial repair and installation with a unique Grip Pack Pouch

CAT. NO.	UPS NO.	DESCRIPTION
46601	01292	Pro COAX Tool Kit

### 46601 PRO COAX TOOL KIT INCLUDES

- R** 0251-08D 8" Diagonal Cutting Pliers, Dipped Grip
- R** 45591 RG59/6/6Q, RG7/11 Coaxial Cable Stripper
- R** PA70020 RG59/6/6Q, RG7/11 Coaxial Cable Crimper
- R** 0153-42C 6-in-1 Multi-Tool (Screwdriver/Nut Driver Tool)
- R** 0354-14 Combo Ratcheting Closed and Open Ended 7/16" Wrench
- R** FL2AAAP LED Water Resistant Penlight
- R** PA5000 Custom Grip Pack Pouch with Belt Clip



## Ultimate Technician Kit



PA4932

CAT. NO.	DESCRIPTION	WEIGHT
PA4932	Ultimate Technician Kit	7.2 lbs

### PA4932 ULTIMATE TECHNICIAN KIT INCLUDES

<b>R</b>	PA1179	KT8 round cable cutter
<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA1257	LC-CST CATV "F" coax stripper
<b>R</b>	PA1923	Untwist tool
<b>R</b>	PA1927	CATV "F" flaring & attachment tool - RG6/RG6 QS
<b>R</b>	PA1559	SealTite® Pro compression crimper
<b>R</b>	PA3589	SurePunch Pro punchdown tool
<b>R</b>	PA4599	SurePunch Pro detachable LED light
<b>R</b>	PA4572	110 blade
<b>R</b>	PA4591	Double 110 blade
<b>R</b>	PA4573	66 blade
<b>R</b>	PA4574	BIX blade
<b>R</b>	PA4575	Krone LSA blade
<b>R</b>	PA1543	LAN ProNavigator® tester & remote
<b>R</b>	PA1573	Telephone Test Set & LAN Cable-Check™
<b>R</b>	PA1902	RJ45 adapter
<b>R</b>	PA1900	Can wrench
	N/A	(10) RJ22 handset plugs
<b>R</b>	PA9520	(10) RJ11/12 plugs, stranded, flat cable
<b>R</b>	PA9546	(10) RJ45 plugs, Cat5e, solid, round cable
<b>R</b>	PA9644	(10) CATV "F" RG6/RG6 QS connectors
<b>R</b>	PA901074	(2) BNC-to-CATV "F" adapters
<b>R</b>	PA4923	Ultimate Tool Bag
	N/A	Plano® plastic tackle box

## Ultimate Premise Service Kit



PA4933

This kit is designed for today's on-the-go LAN professional. It provides all the tools and testers you need to maintain your data, voice and video networks all in our Ultimate Tool Bag that's always ready

CAT. NO.	DESCRIPTION	WEIGHT
PA4933	Ultimate Premise Service Kit	6.1 lbs

### PA4932 ULTIMATE PREMISE SERVICE KIT INCLUDES

<b>R</b>	PA1179	KT8 round cable cutter
<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA1257	LC-CST CATV "F" coax stripper
<b>R</b>	PA8000	CrimpALL® crimp frame with EZI-CHANGE™ thumb screws
<b>R</b>	PA3589	SurePunch Pro punchdown tool
<b>R</b>	PA4572	110 blade
<b>R</b>	PA4573	66 blade
<b>R</b>	PA1543	LAN ProNavigator® tester & remote
<b>R</b>	PA1573	Telephone Test Set & LAN Cable-Check™
<b>R</b>	PA1902	RJ45 adapter
<b>R</b>	PA901074	(2) BNC-to-CATV "F" adapters
<b>R</b>	PA4923	Ultimate Tool Bag
	N/A	Plano® plastic tackle box
	<b>Die Sets:</b>	
<b>R</b>	PA2062	Die Sets: RJ11/12 WE/SS-style
<b>R</b>	PA2687	Die Sets: RJ45 WE/SS-style & RG6/RG6 QS CATV "F"

## Ultimate Coax Compression Tool Kit



This kit is for installing home theaters, HDTV, satellite and digital cable TV systems. It contains everything needed for new home construction or retrofitting sophisticated A/V solutions

CAT. NO.	DESCRIPTION	WEIGHT
PA4939	Ultimate Coax Compression Tool Kit	8.25 lbs

### PA4939 ULTIMATE COAX COMPRESSION TOOL PRO KIT INCLUDES

[R]	PA1821	AM 35 Slitter
[R]	PA1179	KT8 Cutter
[R]	PA1119	UTP/Coax Cutter/Stripper
[R]	PA1280	CST Pro Coax tool
[R]	PA2280	CST Pro GRN Cassette
[R]	PA2281	CST Pro OG – Kings & Amphenol BNC
[R]	PA2282	CST Pro BK – ADC, Amphenol HDTV BNC
[R]	PA2283	CST Pro BL – CATV “F”
[R]	PA2284	CST Pro Rollers
[R]	PA1927	CATV “F” Flaring & Insertion Tool
[R]	PA1557	SealTite® Pro Compression Crimper
[R]	PA1907	BNC Extraction Tool
[R]	PA1908	CATV “F” Extraction Tool
[R]	PA1594	LAN & A/V Cable-Check™ Tester
	N/A	Plano® Tackle Box
[R]	PA4923	Ultimate Tool Bag
[R]	PA9645	(50) SealTite™ CATV “F” – RG59
[R]	PA9720	(10) SealTite™ RCA – RGX
[R]	PA9730	(10) SealTite™ BNC – RGX
[R]	PA906002	(30) Connector & Adapter Assortment Pack

## Ultimate DataReady® Pro Kit



If you're an installer or technician needing a data cable tool kit solution, this is it. It includes all the tools you need for Cat5, Cat5e and Cat6 installation or maintenance in our rugged Ultimate Tool Bag

CAT. NO.	DESCRIPTION	WEIGHT
PA4934	Ultimate DataReady® Pro Kit	5.15 lbs

### PA4932 ULTIMATE DATAREADY® PRO KIT INCLUDES

[R]	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
[R]	PA1923	Untwist tool
[R]	PA8000	CrimpALL® crimp frame with EZI-CHANGE™ thumb screws
[R]	PA3589	SurePunch Pro punchdown tool
[R]	PA4599	SurePunch Pro detachable LED light
[R]	PA4571	110/ 66 blade
[R]	PA4591	Double 110 blade
[R]	PA1543	LAN ProNavigator® tester & remote
[R]	PA4923	Ultimate Tool Bag
	N/A	Plano® plastic tackle box
<b>Die Sets:</b>		
[R]	PA2061	RJ45 WE/SS-style
[R]	PA2062	RJ11/12 WE/SS-style
[R]	PA2063	RJ22 handset
[R]	PA2064	RJ45 AMP-style
[R]	PA2067	RJ11 DEC-MMJ

## Ultimate Data/Voice Pro Kit



This complete kit is for data and voice installation and maintenance stored in the new versatile Ultimate Tool Bag

CAT. NO.	DESCRIPTION	WEIGHT
PA4935	Ultimate Data/Voice Pro Kit	4.5 lbs

### PA4935 ULTIMATE DATA/VOICE PRO KIT INCLUDES

<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA1923	Untwist tool
<b>R</b>	PA1561	All-in-One Phone/Data tool
<b>R</b>	PA3589	SurePunch Pro punchdown tool
<b>R</b>	PA4572	110 blade
<b>R</b>	PA4573	66 blade
<b>R</b>	PA4591	Double 110 blade
<b>R</b>	PA1573	Telephone Test Set & LAN Cable-Check™
<b>R</b>	PA1900	Can wrench
<b>R</b>	PA4923	Ultimate Tool Bag
	N/A	Plano® plastic tackle box

## Ultimate Tool Bag



- Main compartment features removable inner tote and three additional pockets
- Removable inner tote with eight adjustable storage slots keeps smaller tools handy
- Detachable shoulder strap with three anchor points to carry bag horizontally or vertically
- Deep Velcro pockets holds large tools or test equipment
- Plano® divided tackle box neatly stores dies, blades & connectors and fits into all outer pockets
- Sturdy bottom prevents bag from flopping over when sitting upright

CAT. NO.	DESCRIPTION	WEIGHT
PA4923	Ultimate Tool Bag with Plano® tackle box	2.2 lbs

Tools and bits not included

### SealTite® Pro A/V Kit



The SealTite® Pro A/V kit is all you need to make custom length digital and analog audio and component video cables using compression RCA, BNC and cable TV "F" connectors.

CAT. NO.	DESCRIPTION	WEIGHT
PA4915	SealTite® Pro A/V Kit	46 oz

#### SEALTITE® PRO A/V KIT INCLUDES

PA1119	Combination UTP/Coax Data SureStrip®
PA1559	SealTite Pro Compression Crimper
N/A	2 sets of color bands for RCA & BNC Connectors

#### 6 BONUS RG6/RG6 QS Compression Connectors

PA9714	(2) RCA
PA9715	(2) BNC
PA9643	(2) Cable TV "F"

### SealTite® Pro Cable TV "F" Kit



Tackle all of your compression crimping jobs with the complete SealTite® Pro Kit. Includes all the tools you need to prepare the cable and terminate any compression connector using RG59, RG6 or RG6 Quad shield cables

CAT. NO.	DESCRIPTION	WEIGHT
PA4910	SealTite® Pro Kit	46 oz

#### SEALTITE® PRO KIT INCLUDES

<b>R</b> PA1179	KT8 round cable cutter
<b>R</b> PA1257	LC CST CATV "F" coax stripper
<b>R</b> PA1917	RG6/RG6 Quad shield flaring tool
<b>R</b> PA1559	SealTite® Pro compression crimper
N/A	RG6/RG6 Quad SealTite® connectors (10)



## CoaxReady™ Compression Tool Kit



PA906003

Adding to our CoaxReady™ solutions, this kit has everything you will need to terminate any manufacturers' cable TV "F", RCA or BNC compression connectors using RG6, RG6 Quad or RG59 cable sizes

- 12 piece kit
- Includes zippered Cordura® portfolio case

CAT. NO.	DESCRIPTION	WEIGHT
PA906003	CoaxReady™ Compression Tool Kit	3.5 lbs

### COAXREADY™ COMPRESSION TOOL KIT INCLUDES

<b>R</b>	PA1821	AM 35 Slitter
<b>R</b>	PA1179	KT8 Cutter
<b>R</b>	PA1119	Data & AV UTP & Coax Cutter/Stripper
<b>R</b>	PA1280	CST Pro Coax tool
<b>R</b>	PA2280	CST Pro GRN 3-Level Strip Blade Cartridge
<b>R</b>	PA2283	CST Pro OG 3-Level Strip Blade Cartridge
<b>R</b>	PA2282	CST Pro BK 3-Level Strip Blade Cartridge
<b>R</b>	PA2284	CST Pro Rollers
<b>R</b>	PA1927	CATV "F" Flaring & Insertion Tool
	N/A	Zippered Cordura® Portfolio Case

## CoaxReady™ Deluxe Kit



PA901081

Perfect for LAN/Ethernet or video & CATV installation. For a wide variety of coaxial connectors including mini-coax and HDTV applications, CoaxReady™ Deluxe combines our most popular tools for a complete coax solution in a handy zipper case

- Kit also includes terminators and adapters

CAT. NO.	DESCRIPTION	WEIGHT
PA901081	CoaxReady™ Deluxe Kit	3 lbs

### COAXREADY™ DELUXE KIT INCLUDES

<b>R</b>	PA1179	KT8 round cable cutter
<b>R</b>	PA1255	LC CST-58/59 coax stripper
<b>R</b>	PA1302	1300 crimp tool frame with EZI-CHANGE™ thumb screws
<b>DIE SETS:</b>		
<b>R</b>	PA2034	BNC/TNC - RG58/59/62AU
<b>R</b>	PA2649	BNC/TNC - CATV "F" RG59/6/Belden 8281/1694A and 1505A
<b>R</b>	PA2653	SMA/SMB/Mini 59 BNC & TNC/Mini-UHF

## CoaxReady™ Kit



PA901054

With this kit a technician is set to tackle most coaxial cabling challenges Perfect for the LAN/Ethernet or video installation installer. For a wide variety of coaxial connectors including mini-coax applications, CoaxReady™ combines our most popular tools with the new LC CST coax stripper in a handy zippered case

CAT. NO.	DESCRIPTION	WEIGHT
PA901054	CoaxReady™ Kit	2.5 lbs

### COAXREADY™ KIT INCLUDES

<b>R</b>	PA1179	KT8 round cable cutter
<b>R</b>	PA1255	LC CST-58/59 coax stripper
<b>R</b>	PA1302	1300 crimp tool frame with EZI-CHANGE™ thumb screws
<b>DIE SETS:</b>		
<b>R</b>	PA2034	BNC/TNC - RG58/59/62AU
<b>R</b>	PA2075	BNC/TNC - RG58/59/62AU RG6 Teflon/Plenum
<b>R</b>	PA2653	SMA/SMB/Mini 59 BNC & TNC/Mini-UHF

Teflon® is a registered trademark of Dupont



## Telco Technician Tool Kit



PA4938

CAT. NO.	DESCRIPTION	WEIGHT
PA4938	Telco Technician Kit	7.6 lbs

### BROADCASTREADY® PRO KIT INCLUDES

[R]	PA1116	Data SureStrip® UTP/STP Cutter/Stripper
[R]	PA1933	Datacomm Scissors
[R]	PA3570	SurePunch Pro Punchdown Tool
[R]	PA4571	110/66 blade
[R]	PA4599	SurePunch Pro Detachable LED Light
	N/A	Mini-MagLite®
	N/A	Sharpie® Black Marker
[R]	PA4940	GripPack Quick Release PDT Holster
[R]	PA1561	All-in-One Phone/Data Crimp Tool
[R]	PA9655	(50) RJ45 Cat5e Modular Plugs
[R]	PA1902	RJ45 Adapter
[R]	PA1903	RJ11 Adapter
[R]	PA1573	Tone Probe Plus Cable-Check™
[R]	TM500	Butt Set
	N/A	Plano® Tackle Box
[R]	PA4923	Ultimate Tool Bag

## BroadcastReady® Kit



PA901083

The BroadcastReady™ Kit includes professional tools for cutting, stripping, crimping and testing coaxial cable connections for HDTV, video and RF communications. Protected by a padded, zipper case. Also includes a screwdriver to change out die sets

CAT. NO.	DESCRIPTION	WEIGHT
PA901083	BroadcastReady® Kit	3 lbs

### BROADCASTREADY® PRO KIT INCLUDES

[R]	PA1179	KT8 round cable cutter
[R]	PA1280	CST Pro Coax tool
[R]	PA2280	CST Pro GRN – common connectors
[R]	PA2281	CST Pro OG – Kings & Amphenol 3-piece
[R]	PA2282	CST Pro BK – ADC, Amphenol HDTV
	N/A	Screwdriver to change dies
[R]	PA1543	LAN ProNavigator® tester & remote
[R]	PA1600	1600 Series crimp frame

## DataComm Pro Starter Kit Max



This kit is also a starter kit for datacomm professionals

- 66 piece kit
- Includes the complete solution for cutting, crimping, and terminating
- All the tools included come in a compact zipper case

CAT. NO.	DESCRIPTION	WEIGHT
PA4908	DataComm Pro Starter Kit	1.8 lbs

### DATAComm PRO STARTER KIT INCLUDES

<b>R</b>	PA1116	Data SureStrip® UTP/STP Cutter/Stripper
<b>R</b>	PA3570	SurePunch Pro Punchdown Tool
<b>R</b>	PA4528	110 Reversible blade
<b>R</b>	PA1561	All-in-One Phone/Data Crimp Tool
<b>R</b>	PA9520	(10) RJ45 Cat5e Modular Plugs
	N/A	Compact Zipper Case

## DataReady™ Pro Kit



A complete data cable installation kit providing everything to support the installer using commonly-available connectors, and punchdown termination blocks. All tools contained in a professional-quality, soft-sided zipper case with heavy-duty wrist strap

CAT. NO.	DESCRIPTION	WEIGHT
PA901378	DataReady™ PRO Kit	4 lbs
PA9013781	DataReady™ PRO Kit - Krone*	4 lbs

### DATAReady™ PRO KITS INCLUDE

<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA1923	Untwist Tool
<b>R</b>	PA3589	SurePunch Pro punchdown tool
<b>R</b>	PA4599	SurePunch Pro detachable LED light
<b>R</b>	PA4591	Double 110 blade
<b>R</b>	PA4571	110/ 66 blade**
<b>R</b>	PA1543	LAN ProNavigator® UTP/STP continuity tester & remote
<b>R</b>	PA8000	CrimpALL® crimp frame with EZI-CHANGE™ thumb screws

### DIE SETS:

<b>R</b>	PA2061	RJ45 WE/SS-style
<b>R</b>	PA2062	RJ11/12 WE/SS-style
<b>R</b>	PA2063	RJ22 handset
<b>R</b>	PA2064	DRJ45 AMP-style
<b>R</b>	PA2067	RJ11 DEC-MMJ

\* Additional 110 blade included in PA9013781 Kit

\*\* Replaced with Krone blade PA4575 (only with PA9013781 Kit)

## DataReady™ Kit



PA901053

The complete Category 5 datacomm tool set in a handy zipper case. Everything needed for a CAT-5 installation except the cable

CAT. NO.	DESCRIPTION	WEIGHT
PA901053	DataReady™ Kit	3 lbs
PA9010531	DataReady™ Kit - AMP/Krone*	3 lbs

### DATEREADY™ KITS INCLUDE

<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA1561	All-in-One Phone/Data tool*
<b>R</b>	PA3570	SurePunch Impact Punchdown Tool
<b>R</b>	PA4571	110/ 66 blade**
<b>R</b>	PA1576	Data Link/ID and Cable-Check™ Tester
	N/A	(20) RJ45 plugs, Cat5e, solid/stranded; flat/round cable
	N/A	Zipper Case with Carrying Strap

\* WE/SS - style replaced with AMP - style #1557

\*\* Contains 110 & Krone blades PA4575 (only with PA9010531 Kit)

† 68 spring-compression blades precisely adjust to the insulation.

## Premise Service Kit



PA901039

Our biggest data, voice, and coaxial LAN installation kit provides everything for twisted pair and coaxial cable installation. All tools contained in a professional blow-mold case complete with form-fitting foam

CAT. NO.	DESCRIPTION	WEIGHT
PA901039	Premise Service Kit	7.6 lbs
PA9010391	Premise Service Kit - AMP/Krone*	7.6 lbs

### PREMISE SERVICE KITS INCLUDE

<b>R</b>	PA1179	KT8 round cable cutter
<b>R</b>	PA1257	LC-CST CATV "F" coax stripper*
<b>R</b>	PA1116	Data SureStrip® UTP/STP & flat satin cutter/stripper
<b>R</b>	PA8000	CrimpALL® crimp frame with EZI-CHANGE™ thumb screws
<b>R</b>	PA3589	SurePunch Pro punchdown tool
<b>R</b>	PA4599	SurePunch Pro detachable LED light
<b>R</b>	PA4573	66 blade***
<b>R</b>	PA1543	LAN ProNavigator® UTP/STP continuity tester & remote
<b>R</b>	PA1573	Telephone Test Set & LAN Cable-Check™
<b>R</b>	PA1902	RJ45 8-way adapter

### DIE SETS:

<b>R</b>	PA2062	RJ11/12 WE/SS-style**
<b>R</b>	PA2687	RJ45 WE/SS-style & RG6/RG6 QS CATV "F"***

\* Replaced with LC CST-58/59 coax stripper PA1255

\*\* Replaced with RJ45 AMP-style & RG58/59 BNC/TNC dies PA2034, PA2064, PA2065

\*\*\* Replaced with BIX or Krone blade #PA4575 (only with PA9010391 Kit)

## Network Tool Bundle

This new bundle provides the perfect solution for the do-it-yourselfers that want to use professional tools or for small contractors just starting out installing networks. It includes everything you need but the cable to get the job done

PA4909



CAT. NO.	DESCRIPTION	WEIGHT
PA4909	Network Tool Bundle	18.4 oz

### PA4909 NETWORK TOOL BUNDLE INCLUDES

- R** PA1116 Data SureStrip® UTP/STP & flat satin cutter/stripper
- R** PA1561 All-in-One Phone & Data Tool
- R** PA3580 Non-impact 110 punchdown
- R** PA9546 10, RJ45 Cat5e plugs
- R** PA9520 10, RJ11 plugs

### Computer Service Kit

PA4370



- 3.6V cordless screwdriver, battery & charger
- ESD wrist strap
- 30-watt soldering iron
- Desolderer & soldering aid with pick & scraper/cutter tip
- Needle nose pliers (2)
- Angled-head lead cutter
- Insulated tweezers
- Component gripper & IC extractor
- 10-piece driver socket set
- 24-piece driver bit set: Torx, Hex, Phillips, Pozidrive, Slotted, and Square-Head
- Socket adapter/extender & socket bit holder/extender

CAT. NO.	DESCRIPTION	WEIGHT
PA4370	Computer service kit	4.5 lbs

### Cordless Screwdriver & Socket Set

PA4336



- Adjustable torque up to 21.7in-lbs (2.4 N-m)
- Includes 3.6V rechargeable battery
- AC adapter/battery charger & bit holder included
- Forward/reverse direction
- One-hand operation
- Handle swings easily from pistol to rod form
- Includes 14-piece socket set: 6-12 mm; 3/16"-1/2"
- Includes 26-piece driver bits: 3 slotted, 5 Torx, 3 Phillips, 3 Robertson, 12 hex
- Accepts 1/4" bits

#### SPECIFICATIONS

<b>Weight</b>	1.38 lbs. (.63 kg)
<b>Length</b>	9.52" (242 mm)
<b>Power Requirements</b>	3.6V NiCd battery
<b>Battery Life</b>	Approx. 600 cycles
<b>Charging Time</b>	3-6 hours
<b>AC adapter input</b>	120VAC 50-60Hz
<b>No-load Speed</b>	170 rpm
<b>Motor</b>	3.6VDC
<b>Max. torque</b>	21.7 in-lbs. (2.4 N-m)

*Not for use on precision torque screw requirements.*

CAT. NO.	DESCRIPTION
PA4336	Cordless screwdriver & socket set
PA6000	Replacement battery
PA6001	Battery charger





## Voice and Category 5 Data Termination Kit



45469

- Includes the tools and connectors necessary for installing a voice and data network
- Durable Cordura® Plus zipper case protects and organizes tools and includes a see-through pouch for storing connectors
- Outside pockets provide convenient storage of instruction manuals or worksite documents

CAT. NO.	UPC NO.	DESCRIPTION
45469	45469	Voice and Category 5 Data Termination Kit

**Kit Includes:**

45482	45482	Cable Cutter
45579	45579	Kwik Stripper® Twisted Pair Stripper
46023	46023	Punchdown Tool with 110 Blade
46022	46022	66 Style Punchdown Blade
45575	45575	Telephone Ratchet Crimper for 4-, 6- and 8- Position Modular Plugs
45479	45479	Zipper Case

## Category 5 Data Termination and Test Kit



45470

- Includes the tools, connectors and testers necessary for installing a Cat 5 data network
- Durable Cordura® Plus zipper case protects and organizes tools and includes a see-through pouch for storing connectors
- Outside pockets provide convenient storage of instruction manuals or worksite documents

CAT. NO.	UPC NO.	DESCRIPTION
45470	45470	Category 5 Data Termination and Test Kit

**Kit Includes:**

45482	45482	Cable Cutter
45579	45579	Kwik Stripper® Twisted Pair Stripper
46023	46023	Punchdown Tool with 110 Blade
45575	45575	Telephone Ratchet Crimper for 4-, 6- and 8- Position Modular Plugs
468T	60379	Modular Cable Tester Transmitter with Tone Generator
468R	60380	Modular Cable Tester Receiver
45485	45485	Zipper Case

# HAND TOOLS

## Telecom Splice Crimpers



- Side cutter for AWG 19-26 copper
- Non-slip grips for precision control
- Limited lifetime warranty
- Crimp capacity
  - UR: AWG 19-26
  - UY: AWG 22-26
  - UG: AWG 19-26

**PA1180 only**

- Stripping cavity for AWG 22 wire
- Needle-nose with knurled surface for gripping, wrapping and looping

CAT. NO.	DESCRIPTION
PA1180	4-in-1 Telecom Splice Crimper
PA1178	Telecom Splice Crimper

## Round Cable Cutters



- Cuts solid or stranded cable up to AWG 6
- Precise and effortless cuts
- Round cutting form won't deform cables
- Ideal for UTP and Coax, RG58, RG59 and RG6/6Q; RG7 and RG11 with PA1175
- Limited lifetime warranty

CAT. NO.	DESCRIPTION
PA1175	Contour Round Cable Cutter
PA1179	Dual-Contour Round Cable Cutter

## Cable Cutter, 8 AWG



- Designed to cut solid, stranded wire up to 8 AWG (10 mm<sup>2</sup>) and multi-conductor cable up to 1/2" (12.7 mm) in diameter
- Curved cutting blades ensure an easy cut
- Economically priced
- Cushioned-grip handle for comfortable use
- Heat-treated for long life
- Stamped and precision ground from high-carbon tool steel
- Return spring
- Locking latch
- Rust-resistant black oxide finish

CAT. NO.	UPC NO.	DESCRIPTION
45482	45482	Cable Cutter

## Cable Splicer's Knife and Splicer's Snips

PT-K01A



- Cuts cable, telephone wire and strips insulation
- Tough, tempered steel knife blade holds its edge longer
- Full-sized knife handle provides greater comfort
- Knife has a short, coping-type blade made of the finest cutlery steel
- Scissors have an upper blade with two stripping notches to strip most insulations from 19-24 AWG.

CAT. NO.	UPC NO.	DESCRIPTION
PT-K01A	12997	Scissors and Knife Kit in Pouch

## DataComm Snips, Electrician's Snips

PT-T03



- Cuts, strips and trims data and phone cables
- Ergonomic design nests in hand for comfort and added cutting power
- One fully serrated blade for clean cuts
- "V" stripping notches for 19 and 23 AWG wire
- Manufactured from high-carbon steel, chrome over nickel plate

CAT. NO.	UPC NO.	DESCRIPTION
PT-T03	89195	Snips

## Pro Stainless Steel Wire Strippers / Cutters / Crimpers

**NEW**  
PRODUCT



1955-SS



- Cutlery grade stainless steel prevents wear and corrosion to provide 5X longer life
- Pliers grab, form and bend wires
- Precision ground strippers engineered for clean, easy insulation removal
- Bolt Threaders clean threads after shearing
- Comfort Grips are double molded, lightweight and easy to grab
- Professional, multi-function tool includes a crimper, looper, non-obstructive lock mechanism, spring return, and high grade shears
- Note: this is not an insulated tool
- Lifetime warranty

CAT. NO.	UPC NO.	DESCRIPTION	SOLID STRIP	STRANDED STRIP	BOLT SHEAR	CRIMP
1950-SS	02241	Pro Stainless Wire Stripper / Cutter / Crimper	10-18	12-20	6-32, 8-32	16-10
1955-SS	01361	Pro Stainless Wire Stripper / Cutter / Crimper (Curve)	10-18	12-20	6-32, 8-33	16-10
1956-SS	02242	Pro Stainless Wire Stripper / Cutter / Crimper (Curve)	6-14	8-16	6-32, 8-34	16-10

## GripP-Strippers 10 & 20



PA1117

- Head of tool and handles designed at optimum 22° angle to prevent awkward wrist bends
- Precision ground blades ensure consistent stripping and cutting
- Features screw cutter and wire loops embedded in frames
- Built-in safety lock
- Gripping jaws on front of tool for pulling wire
- PA1117 will work on Romex household cable
- Note: This is not an insulated tool

CAT. NO.	DESCRIPTION	CAP (AWG)	
		SOLID	STRANDED
PA1117	GripP 10 cutter/stripper	10-22	12-24
PA1118	GripP 20 cutter/stripper	20-30	22-32
PA1123	Wire Stripper Bundle, includes both PA1117 and PA1118		

Do not use on live circuits.

## stripax® Pro 6



PA2113

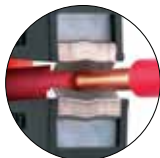
- Strips heavy-duty and industrial insulations including THHN & THHW
- Strips standard insulations including PVC, rubber and silicone.
- Provides nick-free stripping of insulation with no damage to conductors
- Built-in cutter provides a smooth, straight cut without distorting the conductor
- Fine adjustment slider on top of tool lets you adjust to the insulation thickness
- Handles designed for comfort and require low hand force
- Not for Teflon or Kapton hard insulations (use part number PA1115P mini-stripax Plus with a Teflon blade for these insulations)
- Perfect companion for any of our wire ferrule crimpers
- Strippers carry a lifetime warranty; blade warranty is one year for defects only
- Lifetime limited warranty

CAT. NO.	DESCRIPTION	WEIGHT
PA1113	stripax® Pro 6 (28-10 AWG) (.08-6.0 mm2)	5.5 oz
PA2113	stripax® Pro 6 replacement stripping blade set	

Do not use on live circuits

† 68 spring-compression blades precisely adjust to the insulation.

Teflon® is a registered trademark of Dupont



68 spring-compression blades on Pro 6†



Adjustable wire stop to set strip lengths



Cutter on bottom means less hand force required



Round stripping blades on Pro 16 cut insulation cleanly

## mini-stripax® plus



PA1115P

- Strips flexible and solid conductors with PVC, Teflon, silicone and other special insulations
- Strips multiple conductors and thin ribbon-cable conductors simultaneously
- Adjustable wire stop and built-in wire cutter
- 28-18 AWG (0.80-1.0 mm<sup>2</sup>) PVC blade included
- See replacement blades in next section
- Limited lifetime warranty

*Strips PVC only. Do not use on live circuits.*

*For Teflon, order blades separately see below in mini-stripax plus Replacement Blades Section.*

CAT. NO.	DESCRIPTION	WEIGHT
PA1115P	mini-stripax® plus (28-18 AWG)	4 oz

*Teflon® is a registered trademark of Dupont*

## Adjustable Wire Stripper & Cutter



PA1161

- Economical wire stripping tool for multiple cables
- Made of high carbon steel and heat treated for long life
- Adjustable settings for wire sizes from 30-10 AWG

*Do not use on live circuits.*

CAT. NO.	DESCRIPTION	WEIGHT
PA1161	Adjustable wire stripper & cutter (30-10 AWG)	3 oz



## Combo UTP/Coax SureStrip®



PA1119

- Professional all-in-one cutter/stripper for coaxial and twisted pair cables
- Cuts and strips multiple cable types:
  - Coax: RG6, RG6 Quad and RG59
  - Twisted Pair (UTP/STP): Cat6, Cat5e and Cat5
- Easy-to-use combination cutter/stripper
- Adjustable stripping blade for UTP/STP; accommodates different insulation thicknesses without damaging conductors
- Self-regulating cassette blade prevents nicks
- Coax blade cassette is removable to adjust stripping depth of both blades with hex key included (Note: Hex key stores securely in bottom of tool)
- Contoured finger grips for cutting power

CAT. NO.	DESCRIPTION	WEIGHT
PA1119	Combo UTP/Coax SureStrip®	2.5 oz
PA2119	Coax Blade Cassette	—
PA2120	UTP Cut/Strip Blade	—

## Data SureStrip®



PA1116

- Small, compact tool that cuts and strips multiple cable types:
  - 4-, 6- and 8- conductor flat satin cables
  - 4-, 6- and 8- conductor UTP/STP data cables
  - 25- vpair UTP/STP data and telephone cables
- Multi-conductor round bundled cables with a maximum diameter of .5" (12.7 mm)
- 14-8 AWG (2.5-75mm<sup>2</sup>) wire
- Nylon reinforced ABS plastic with stainless steel blade
- Fully adjustable with simple thumb screw
- Self-regulating to prevent nicking
- Contoured finger grips for power cutting

CAT. NO.	DESCRIPTION	WEIGHT
PA1116	Data SureStrip®	2.5 oz

## CST vario Stripper



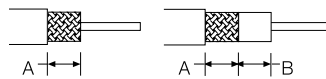
- Most flexible coax stripping tool on the market
- Easy to set up and adjust
- Two- and three-level stripping
- Minimum center-to-center strip length is 0.13" (3.2 mm)
- Maximum total strip length is 0.67" (17 mm)
- Adjustable blade positioning in 0.04" (1 mm) increments
- Lifetime warranty on frame only

\*Not recommended for use on LMR or Teflon cables.

CAT. NO.	DESCRIPTION
PA3240	CST vario stripper
<b>R</b> PA3242	Replacement blade holder, blades & allen hex key

Teflon® is a registered trademark of Dupont

## CST Strippers



- Fixed blade system that accommodates 0.1"-0.315" (2.5-8.0mm) cable diameters including RG58/59/62AU, RG6, RG6 Quad, RG174, Belden 1505A, 1855A and 8281
- Cam adjustment ensures precise and repeatable hold on cable
- Memory blocks reduce set-up time and are easy to interchange and mark for various applications
- Blades are two-sided for longer use
- No cable jacket distortion during stripping process
- Blade cassettes easy to change
- Lifetime warranty on frame only

CAT. NO.	DESCRIPTION	COMMON USES
PA1240	CST Green - 3 Level (A=.279, B=.201)	Common 2- & 3-piece
PA2240	Green Blade Cassette only	
PA1243	CST Brown - 3 Level (A=.295, B=.137)	
PA2243	Brown Blade Cassette only	
PA1247	CST Orange - 3 Level (A=.327, B=.146)	Kings, Amphenol 3-piece
PA2247	Orange Blade Cassette only	
PA1248	CST Black - 3 Level (A=.344, B=.094)	ADC, Amphenol HDTV
PA2248	Black Blade Cassette only	
PA1250	CST Frame only	
PA2245	CST Memory Cartridge only	



**Y-block** – inserts into tool to tighten up rollers for smaller cable sizes



PA2240



PA2247



PA2248

### CST Pro Coax Stripper



PA1282



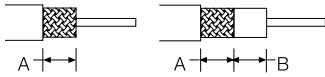
PA2284 Reversible Rollers



PA2282 3 Level



Blade Adjustment Screws



- New patent-pending coax stripping system for precision & accuracy
- Works with a wide range of cable diameters from .1" - .315" (2.5-8.0mm) including: RG58/59/62AU, RG6/6QS, RG174, Belden 1505A, 1855A & 8281 and mini-coax
- Pre-set for standard 2- and 3- level strip lengths
- Coax stripper designed for pros requiring precision, versatility & ease of use.
- Reversible-rollers easily adjust for various cable sizes including mini-coax.
- Dual roller mechanism perfectly centers cable & applies equal pressure to eliminate cable distortion
- Quick-change pre-set blade cassettes
- Cam adjustment ensures precise hold on cable
- Fixed blade cassettes pre-set for standard 2- and 3- level strip lengths
- Interchangeable blades reduce set-up time
- Lifetime warranty on frame only

CAT. NO.	DESCRIPTION	COMMON USES
PA1280	CST Pro Green 3-level (A=.279, B=.201)	Common 2- & 3-piece
PA2280	Green Blade Cassette only	
PA1281	CST Pro Orange 3-level (A=.327, B=.146)	Kings, Amphenol RFX 3-piece
PA2281	Orange Blade Cassette only	
PA1282	CST Pro Black 3-level (A=.344, B=.094)	ADC, Kings, Amphenol HDTV, Mini's
PA2282	Black Blade Cassette only	
PA1283	CST Pro Blue 2-level (A=.250)	Standard RG6/6QS & RG59, CATV "F", Mini's
PA2283	Blue Blade Cassette only	
PA1285	CST Pro Frame only	
PA2284	CST Pro Rollers only	

### LC CST Strippers



PA1255

- Self-regulating tension
- Adjust cutting depth on each blade for varying cable thicknesses with the included hex key
- Pre-set for common strip lengths
- Blades adjust for strip dimensions other than our standard pre-set units\*

SPECIFICATIONS	PRESET STRIP LENGTHS*	CABLE USAGE
<b>LC CST-58/59</b>	0.315" outer jacket 0.157" inner dielectric	RG58, RG59, RG62 AU & RG6
<b>LC CST-11</b>	0.315" outer jacket 0.157" inner dielectric	RG8, RG11 & RG213
<b>LC CST CATV "F"</b>	0.236" outer jacket	RG59, RG6 & RG6 QUAD CATV "F" (preset for RG6 CATV "F")
<b>LC CST-Mini</b>	0.344" outer jacket 0.094" inner dielectric	RG178, RG179, RG188, AT&T 735(A), NT735, Belden 1855A, Belden 8218, RG180, RG187, RG188A, RG405 and more

CAT. NO.	DESCRIPTION
PA1255	LC CST-58/59 – 2- & 3-Level, Adjustable
PA1256	LC CST-11 – 2- & 3-Level, Adjustable
PA1257	LC CST CATV "F" – 2-Level
PA1258	LC CST-Mini
PA2263	Replacement Blade

\*To adjust strip lengths simply change blade locations in the lower jaw to attain the following: .157" (4 mm), .236" (6 mm), .315" (8 mm), .394" (10 mm) and .472" (12 mm)  
Not recommended for use on LMR or Teflon cables.

Teflon® is a registered trademark of Dupont

## Kwik Stripper® Twisted Pair Stripper



45579

- No tool is better for trimming the jacket from twisted pair cable without damaging the individual conductors
- Blade depth adjustment ensures precise cutting depth
- Blade penetration controlled by tension loop
- Strip length gauge

CAT. NO.	UPC NO.	DESCRIPTION
45579	45579	Kwik Stripper® Twisted Pair Stripper



45579

Typically used for Modular Plug Connectors (See pages 373)

## Pro Kwik Stripper® CATV



45591

- Designed for the professional CATV cable installer. Uses reversible stripping cartridges for RG6, RG59, RG11 and RG7 CATV cables that are replaceable
- No adjustments needed
- Included with the tool, the RG6/RG59 cartridge strips cable jacket and dielectric to 1/4" (6.4 mm)
- Included with the tool, the RG11/RG7 cartridge strips cable jacket and dielectric to 1/4" (6.4 mm)
- Extra-large finger hole

CAT. NO.	UPC NO.	DESCRIPTION
45591	01174	Pro Kwik Stripper® CATV

## AM 25 Slitter



PA1820

- Strips and slits 0.18" to 1.0" (4.5-25mm) diameter Round Cables
- Adjustable cutting depth
- Swivel blade for circular, longitudinal and spiral cuts
- Spare blade in handle
- Cable holding clip with integrated edge for removing slit insulation
- Laser-trimmed, stainless-steel blade for long use
- Slits PVC, Teflon and THHN
- Perfect for armored cable

CAT. NO.	DESCRIPTION
PA1820	AM 25
PA2109	Replacement blade

*NOTE: Do not use on live circuits. Not for polyethylene, polypropylene or XLP insulations  
Teflon® is a registered trademark of Dupont*

## AM 35 Slitter



PA1821

- Strips and slits 1.0" to 1.4" (25-35mm) diameter Round Cables
- Adjustable cutting depth for insulation up to 0.18" (4.5 mm) thick
- Swivel blade for circular, longitudinal and spiral cuts
- Spare blade in handle
- Cable holding clip with integrated edge for removing slit insulation
- Laser-trimmed, stainless-steel blade for long use
- Slits PVC, Teflon and THHN

CAT. NO.	DESCRIPTION
PA1821	AM 35
PA2109	Replacement blade

*Teflon® is a registered trademark of Dupont  
NOTE: Do not use on live circuits. Not for polyethylene, polypropylene or XLP insulations*

## Universal Slitter



PA1822

- Strips and slits 0.18" to 1.0" (4.5-25mm) diameter Round Cables
- Precision stripping and slitting of rubber, PVC, nylon and most insulation materials
- Adjustable depth of cut
- Swivel blade for circular, longitudinal and spiral cuts
- Cable is supported during use
- Cable support arm edge is used to pry off thick insulation
- Laser-trimmed, stainless-steel blade for long use
- A perfect tool for mid-point taps
- Spare blade included

CAT. NO.	DESCRIPTION
PA1822	Universal splitter
PA2109	Replacement blade

*NOTE: Do not use on live circuits. Not for polyethylene, polypropylene or XLP insulations*



## Pocket Cable Stripper



- Specifically designed for stripping power and telecommunications cables from 3/4" to 1-1/2" in diameter (19 mm to 40 mm)
- Strips solid conductor, stranded conductor and multiple conductor cables
- Easy blade depth adjustment
- Blade rotates for circular, longitudinal and spiral cuts.

CAT. NO.	UPC NO.	DESCRIPTION
1903	12679	Cable Stripping Tool
<b>R</b> 13544	13544	Replacement Blade (2 per package)
<b>R</b> 13545	13545	Replacement Small Hook
<b>R</b> 13546	13546	Replacement Large Hook

## Cable TV "F" Flaring & Attachment Tool



- Flares RG59, RG6 and RG6 Quad Cable types
- Works with CATV "F" connectors
- Save time on cable TV and satellite installations
- Flare the shield braid back from the dielectric without nicking your finger
- Make connections faster and easier with properly prepped cable
- Attachment tool enables you to hold the connector comfortably to insert onto cable

CAT. NO.	DESCRIPTION
PA1927	Cable TV "F" Flaring & Attachment Tool

## Coax 3-Way Tool



- Flares RG6 and RG6 Quad Cable types
- Flares shield braid back from the dielectric without nicking your fingers
- Attachment tool enables you to hold the connector comfortably to insert connector onto cable
- Extraction tool to assist in coupling connector to port or to assist in uncoupling from port
- Works with CATV "F" connectors

CAT. NO.	DESCRIPTION
PA1928	Coax 3-Way Tool

## RG59/RG6/RG6 Quad Flaring Tool



PA1917

- Works on RG59 and RG6/6 Quad cable
- Flares shield away from center dielectric
- Saves time on CATV and satellite installation

CAT. NO.	DESCRIPTION
----------	-------------

PA1917	RG59/6/6QS flaring tool
--------	-------------------------

## BNC and CATV "F" Extraction Tools



PA1907

PA1908

PA1916

- Chrome finish
- Comfortable driver-style plastic handle
- 1908 CATV "F" is a combination tool. Use the hex socket to easily remove and insert the connectors; Use the threaded end to hold the connector while you insert cable for connectors. Helps to prevent finger injuries

CAT. NO.	DESCRIPTION
----------	-------------

PA1908	CATV 8" (203 mm)
PA1907	BNC 8" (203 mm)
PA1916	BNC 12" (305 mm)

## SealTite® ProM Coax Crimper



PA1559

- Crimps weatherproof linear CATV "F", BNC, RCA & right- angle compression-type connectors from all manufacturers
- Works with RG6, RG6 Quad, RG59 & RG62AU coax cables
- Versatile tool - accommodates multiple connectors
- The only tool with a single, reversible head eliminating need for adapters.
- No additional parts, attachments or other tools required to change from one crimp style to another
- Quickly & easily adjust crimp height
- Once properly set, lock with adjustment lock
- Rated life cycle 30,000 (unloaded)

CAT. NO.	DESCRIPTION
----------	-------------

PA1559	SealTite® ProM Coax Crimper
--------	-----------------------------

## RG59/6Q-7/11 Pro Coax Compression Tool



PA70020

- Versatile tool crimps RG59, RG6, RG6 Quad, RG 7/11, BNC and RCA Compression Connectors
- Cable holder rotates to accommodate different connector sizes
- Adjustable Crimp length accommodates most manufacturers' connectors
- Once adjusted, no additional parts or adapters are needed to change from one crimp style to another

CAT. NO.	DESCRIPTION
PA70020	RG59/6Q-7/11 Pro Coax Compression Tool

## SealTite® 59/6 CATV "F" Compression Crimper



PA901024

- Performs compression crimping of waterproof CATV "F" connectors for RG59 and RG6/RG6 Quad 75 ohm coaxial cables
- Works on Augat/T&B Snap-N-Seal™ connectors, AIM CATV "F" waterproof connectors and Paladin SealTite™ connectors
- Fully ratcheting one-cycle crimp function

CAT. NO.	DESCRIPTION
PA901024	SealTite® Crimper

### SealTite® Cable TV “F” Compression Connectors



- Large hex nut for easy installations
- Patented design with 360° cable gripping sleeve
- Solid brass construction with nickel plating to prevent UV degradation

DESCRIPTION	RG6 & RG6 Quad		
	RG59 CAT. NO.	RG6 Quad CAT. NO.	RG6 Quad CAT. NO.
10 Pack Clamshell	PA9642	PA9643	PA9644
20 Pack Clamshell	PA9610	PA9611	PA9612
50 Pack Jar	PA9645	PA9646	PA9647
100 Pack Bulk	N/A	PA9614	PA9615

\*Also available in retail jar pack, PA9687.

### SealTite® RCA Compression Connectors



- Patented design with 360° cable gripping sleeve
- Full gold contacts for low signal loss
- Includes slip-on color bands for easy cable identification
- A set of bands includes 4 red, 2 green, 2 blue, 2 yellow and 2 white per ten connectors
- Constructed from solid brass with nickel plating

DESCRIPTION	RG6 & RG6 Quad	
	RG59 CAT. NO.	RG6 Quad CAT. NO.
10 Pack Clamshell	PA9720	PA9714
50 Pack Jar	PA9721	PA9716

### SealTite® BNC Compression Connectors



- Patented design with 360° cable gripping sleeve
- Full gold contacts for low signal loss
- Includes slip-on color bands for easy cable identification
- A set of bands includes 4 red, 2 green, 2 blue, 2 yellow and 2 white per ten connectors
- Constructed from solid brass with nickel plating

DESCRIPTION	RG6 & RG6 Quad	
	RG59 CAT. NO.	RG6 Quad CAT. NO.
10 Pack Clamshell	PA9730	PA9715
50 Pack Jar	PA9731	PA9740

### Hex Crimp Cable TV “F” Connectors



- Crimp-on style cable TV “F” connectors
- All-brass with nickel plating for durability
- Designed for indoor use

DESCRIPTION	RG59	RG6	RG6 Quad
	CAT. NO.	CAT. NO.	CAT. NO.
10 Pack Clamshell	PA9676	PA9677	PA9678

### Twist-On Cable TV “F” Connectors



- Connectors twist onto cable for quick installation
- Sharp threads firmly grip cable for good connections
- EZ-SPIN™ hex nut for easy installation

DESCRIPTION	RG59	RG6
	CAT. NO.	CAT. NO.
10 Pack Clamshell	PA9694	PA9695

## Push-On Cable TV "F" Connectors



PA9682

- No crimp tool required. Simply strip cable and push connector onto it
- Special knurled nut offers superior grip for strong connection
- All brass, nickel-plated for durability and low signal loss
- For indoor usage only

	RG59	RG6
<b>DESCRIPTION</b>	<b>CAT. NO.</b>	<b>CAT. NO.</b>
10 Pack Clamshell	PA9682	PA9683

## Other Coaxial Connectors



PA9719

PA901074

Connect CATV "F" cables to RCA plugs.

- Eliminate the need for new cabling
- Solid brass with nickel plate
- 75 ohm rating

CAT. NO.	DESCRIPTION
PA9719	Adapter, CATV "F" (female) to RCA (male) (Qty. 10)
PA901074	Adapter, CATV "F" (female) to BNC (male) (Qty.1)

## Dual Port Ground Block



PA9675

- Provides a positive ground connection between two coaxial shields and the ground wire
- Creates a connection for the dissipation of any unwanted electrical charges
- Solid nickel plated zinc alloy
- High-performance, 360° contact, for up to 3.0 GHz
- Suitable for satellite or cable TV
- UL/CSA approved

CAT. NO.	DESCRIPTION
PA9675	Dual Port Grounding Block

## Cable TV "F" Terminators



PA9686

- Solid brass body with nickel plating
- ½ watt resistor (5% tolerance); 75 ohm

CAT. NO.	DESCRIPTION
PA9686	CATV "F" Terminators (10)

## Female Splice Adapter



PA9675

- Cable TV "F" female-to-female barrel adapter
- Designed for performance up to 3.0 GHz
- Gold-plated contacts
- 2 pack

CAT. NO.	DESCRIPTION
PA9675	Female Splice Adapter

## BNC Coaxial Adapter



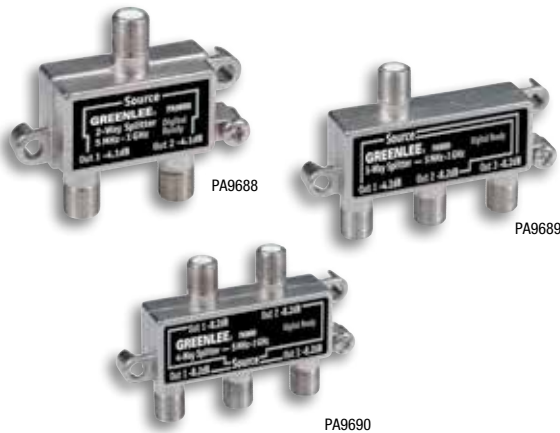
45728

- Precision manufactured from machined brass and nickel plated for corrosion resistance

CAT. NO.	DESCRIPTION
45728	BNC Straight Jack to Jack (1)



### Cable TV Splitters



- Split analog and digital cable TV signals to 2 to 4 outlets
- HDTV compatible and works with cable modems
- 75 ohm impedance
- 5-1000 MHz bandwidth
- “F”-style female ports

CAT. NO.	DESCRIPTION
PA9688	2-Way Cable TV Splitter
PA9689	3-Way Cable TV Splitter
PA9690	4-Way Cable TV Splitter

### Satellite TV Splitters



- Split satellite and digital signals to multiple outlets
- Compatible with most digital satellite brands, digital cable TV and HDTV.
- 75 ohm impedance
- 5-2400 MHz bandwidth
- “F”-style female ports

CAT. NO.	DESCRIPTION
PA9669	2-Way Satellite TV Splitter
PA9670	3-Way Satellite TV Splitter
PA9671	4-Way Satellite TV Splitter

### Satellite Diplexer



- Combines signal from satellite dish and UHF/VHF antenna into single coax cable output
- 5-860 MHz antenna and 950-2450 satellite power pass
- For RG6 or RG6 Quad
- An additional diplexer can be used to split signals again for connection to satellite and antenna ports on receivers
- Diplexed signals can be distributed through an amplifier to send signal to multiple outlets

CAT. NO.	DESCRIPTION
PA9673	Satellite Diplexer

### In-Line Amplifier



- Boost signals to multiple outlets or on long cable runs
- Works with satellite dish or terrestrial antenna installations with over 50' of cable
- Digital TV ready
- 20 dB gain
- DC 12-18V
- 950-2400 MHz maximum bandwidth

CAT. NO.	DESCRIPTION
PA9672	In-Line Amplifier

## SurePunch Pro Punchdown Tool



PA3590

- Terminate cable in single punch - including 23 AWG Cat6
- Detachable light with long-life LED specially designed to focus the light on the panel work area
- Luminous intensity of the LED is 2200 mcd
- Finger grips and non-slip rubber-embedded cushioned handle for comfort
- Multi-use spudger that can be used as a screwdriver or an IDC contact insertion tool
- Hook to feed wires through holes
- Pick to separate bonded twisted-pair cables or to strip insulation and cut wire
- Adjustable HI/LO spring compression for all cable types  
LO = 27.5 lbs (122 N), HI = 37.5 lbs (167 N)
- Uses twist-and-lock style blades
- Blade storage area in end of handle with comfortable latch cover

CAT. NO.	DESCRIPTION
	<b>Tools with lights</b>
PA3590	SurePunch Pro PDT handle (no blade) and light
PA3584	SurePunch Pro PDT with Double 110 blade and light
PA3587	SurePunch Pro PDT with 110 & 66 reversible cut & punch/punch-only blades and light
PA3588	SurePunch Pro PDT with 1110/66 combination cut-only blade and light
PA3596	SurePunch Pro PDT with 110 reversible cut & punch/punch-only blade and light
PA3598	SurePunch Pro PDT with BIX™ cut-only (scissors type) blade and light
PA3599	SurePunch Pro PDT with Krone® LSA cut-only (scissors type) blade and light
	<b>Tools without lights</b>
PA3589	SurePunch Pro PDT handle (no blade)
PA3585	SurePunch Pro PDT with Double 110 blade
PA3586	SurePunch Pro PDT with 110 & 66 reversible cut & punch/punch-only blades
PA3591	SurePunch Pro PDT with 1110/66 combination cut-only blade
PA3592	SurePunch Pro PDT with 110 reversible cut & punch/punch-only blade
PA3593	SurePunch Pro PDT with 66 reversible cut & punch/punch-only blade
PA3595	SurePunch Pro PDT with Krone® LSA cut-only (scissors type) blade
PA4599	SurePunch Pro PDT detachable light and batteries

### SurePunch Punchdown Tools



PA3570



PA4591 PA4573 PA6514 PA4571 PA4574 PA4572 PA4575

- Cushion grip, molded to the shape of your hand, for comfort and a sure, non-slip hold
- Increased HI/LO impact force to meet demands of new cable types and AWG sizes: LO= 30 lbs (133 N), HI= 40 lbs (178 N)
- For 28-22 AWG (0.08 - 0.34 mm<sup>2</sup>), solid or stranded wire
- Uses twist-and-lock style blades
- Cushioned heel for comfort in the palm of your hand
- New latch cover blade storage area in end of handle
- Lanyard holes in end

**CAT. NO. DESCRIPTION**

PA3570	SurePunch PDT® handle (no blade)
PA3571	SurePunch PDT® with 110/66 combination cut-only blade
PA3572	SurePunch PDT® with 110 reversible cut & punch/punch-only blade
PA3573	SurePunch PDT® with 66 reversible cut & punch/punch-only blade
PA3574	SurePunch PDT® with BIX™ cut-only (scissors type) blade
PA3575	SurePunch PDT® with Krone® : SA (scissors type) blade
PA3576	SurePunch PDT® with Double - 110 blade
PA3579	SurePunch PDT® with both 110 and 66 reversible cut & punch/punch-only blades
<b>R</b> PA4571	SurePunch 110/66 combination cut-only blade
<b>R</b> PA4572	SurePunch 110 reversible blade
<b>R</b> PA4573	SurePunch 66 reversible blade
<b>R</b> PA4574	SurePunch BIX™ cut-only blade
<b>R</b> PA4575	SurePunch Krone® LSA cut-only blade
<b>R</b> PA4591	SurePunch Double - 110 blade
PA6514	Telephone Unwrap Bit

### Impact Punchdown Tools



PA3528



PA4527 PA4528 PA4531

- For 28-24 AWG Solid or Stranded conductor
- Standard impact compression design
- Adjustable HI/LO settings for compression force
- Impact force: HI = 35 lbs. (110 N), LO = 25 lbs. (155 N)
- Reversible clip-in blades (except BIX & Krone)
- Punches down with or without cut function (except BIX & Krone)
- Spare blade stores in handle of tool (except BIX & Krone)
- Impact handle and blades available separately
- Leather holster available to attach to belt

**CAT. NO. DESCRIPTION**

PA3526	Impact punchdown (tool handle only)
PA3527	Impact punchdown w/66 blade
PA3528	Impact punchdown w/110 blade
<b>R</b> PA4527	Replacement 66 blade
<b>R</b> PA4528	Replacement 110 blade
<b>R</b> PA4531	Replacement Krone®-type blade

## Punchdown Tool



46023

- Inserts wire for a corrosion-resistant termination and trims off excess wire
- Terminates 66, 110, BIX and Krone cross-connect and wall jacks
- Spring-loaded for fast, low-effort wire seating and termination
- Internal impact mechanism eliminates jamming for longer, trouble-free service life
- Adjustable low - and high-impact force settings
- Bayonet-style blade locking mechanism
- Neoprene pad for shock absorption
- Spare blade storage in the handle
- Color-coded yellow on the cut side of tool

CAT. NO.	UPC NO.	DESCRIPTION
46020	46020	Punchdown Tool Only
46021	46021	Punchdown Tool w/66 Blade
46023	46023	Punchdown Tool w/110 Blade
<b>R</b> 46022	46022	66 Style Blade
<b>R</b> 46024	46024	110 Style Blade
<b>R</b> 46025	46025	BIX Style Blade

## ProPunch™ 110 Multi-pair Punchdown



PA3560

Terminates and cuts up to five pairs of data/voice cable at the same time! We designed it to perform over 30,000 cycle punches and to terminate most 23 AWG cable pairs in one punch! This tool delivers more than one and a half times the force of other multi-punchdown tools on the market today. The rugged “no-slip” handle fits comfortably in your hand with the handle end contoured to the heel of your hand

- Fewer punches saves time
- Smooth operation and rugged, comfortable handle absorbs punch recoil
- Terminates 28-22 AWG (.08 - .34 mm<sup>2</sup>) solid or stranded wires with single insulation
- Cut and punch blade cassette or switch blades for punch only
- Designed to work with 23 AWG CAT 6 cable

CAT. NO.	DESCRIPTION
PA3560	ProPunch 110 with 5-pair head
PA3561	ProPunch 110 with 4-pair head
<b>R</b> PA4560	Replacement 5-pair head
<b>R</b> PA4561	Replacement 4-pair head
<b>R</b> PA4562	Replacement 5-pair blade cassette
<b>R</b> PA4563	Replacement 4-pair blade cassette

### Non-Impact Punchdown Tools with Fixed Blades



- Non-impact, low-cost punchdown tools for 110, 66 & BIX
- Works with 28-22 AWG (.08 - .5 mm2)
- Solid or stranded, single insulation wire
- Comfortable rubber handle grip
- Performs both cut and punch functions
- Perfect for small jobs and the do-it-yourself installer
- Fits in the palm of your hand
- Typically lower in cost than replacement blades for punchdown tools

CAT. NO.	DESCRIPTION	WEIGHT
PA3580	110 Punchdown Tool	3 oz
PA3581	66 Punchdown Tool	3 oz
PA3582	BIX™ Punchdown Tool	3 oz

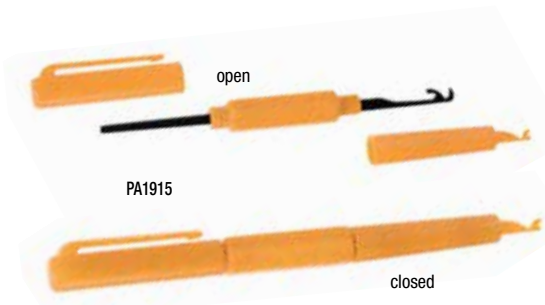
### Punchdown Stripper



- Self-regulating strip depth
- Fast and easy to use
- Great for CAT-5, CAT-5e, and CAT-6 data cable
- Built-in 110 punchdown (punch only)

CAT. NO.	DESCRIPTION	WEIGHT
PA1913	Punchdown stripper	2 oz

### Pocket Probe Pick



- Probe pick for pulling wire, slicing, stripping cable and cleaning debris off terminal panels. Small and lightweight—pen-sized with clip for carrying in pocket
- Spudger tip
  - Wire hook
  - Wire stripper and slitting tooth
  - Non-conductive scraping tip

CAT. NO.	DESCRIPTION	WEIGHT
PA1915	Pocket probe pick	3 oz

### Can Wrench



- Strips PVC insulation
- Strips outer jacket of AWG 22/4 and 24/4 telephone cable
- Strips insulation of AWG 22 (.34 mm2) and AWG 24 (.20 mm2) wire
- 3/8" (9.5 mm) and 7/16" (11 mm) hex sockets for accessing panels
- Durable shock-resistant design

CAT. NO.	DESCRIPTION: HEAVY DUTY KEYSTONE TIP-	WEIGHT
PA1900	Can Wrench	5 oz



# Jack Terminator



PA8100

- High-grade, hardened steel frame offers superior performance and durability
- Ratcheted action to ensure proper, consistent termination
- Adjustment feature for extra leverage applications
- Quick-change punch sets require no tools
- Removable jack cradle allows for alternate lacing option
- Punch heads can be purchased separately
- Rubber-embedded handles provide extra comfort
- For use with Modular Jacks listed below including CommScope® (Systemax®, Uniprise®), Leviton®, OCC®, HellermannTyton®, Hubbell®Premise Wiring and Legrand® (Ortronics®)
- Lifetime Warranty (crimper frame only)

## SPECIFICATIONS

Specifications	PA8100	General Jack Terminator™ With Punch Down Head-Set	General Punchdown Head-Set	General Punch Head Only
Length	9.6" (245 mm)	9.75" (248 mm)	1.6" (40 mm)	1" (26 mm)
Height	3.25" (80 mm)	4" (102 mm)	4" (102 mm)	2.1" (55 mm)
Width	1.25" (32 mm)	1.25" (32 mm)	1.25" (32 mm)	1.25" (32 mm)
Weight	1.25 lbs (575 g)	1.4 lbs (652 g)	2 oz (54 g)	0.8 oz (23 g)

CAT. NO.	DESCRIPTION	JACK COMPABILITY
PA8100	Jack Terminator™ Crimper Frame	Punchdown Head Set not Included
PA8105	Jack Terminator™ with Punchdown Head-Set	Systemax® - MPS100E, Uniprise® UNJ600/500
<b>R</b> PA3711	Replacement Punchdown Head-Set	Systemax® - MPS100E, Uniprise® UNJ600/500
<b>R</b> PA3811	Replacement Punch Head Only	Systemax® - MPS100E, Uniprise® UNJ600/500
PA38106	Jack Terminator™ with Punchdown Head-Set	Systemax® - MGS400, MGS500, MGS600
PA3712	Replacement Punchdown Head-Set	Systemax® - MGS400, MGS500, MGS600
PA8107	Jack Terminator™ with Punchdown Head-Set	Leviton® - 41106, 41108, 5G108
PA3713	Replacement Punchdown Head-Set	Leviton® - 41106, 41108, 5G108
PA8108	Jack Terminator™ with Punchdown Head-Set	Leviton® - 61110, 5G110, 6110G
PA3714	Replacement Punchdown Head-Set	Leviton® - 61110, 5G110, 6110G
PA8109	Jack Terminator™ with Punchdown Head-Set	OCC® - KMJA5E, KMJA6, K6A
PA3715	Replacement Punchdown Head-Set	OCC® - KMJA5E, KMJA6, K6A
PA8110	Jack Terminator™ with Punchdown Head-Set	HellermannTyton® - RJ45FC5E, RJ45FC6
PA3716	Replacement Punchdown Head-Set	HellermannTyton® - RJ45FC5E, RJ45FC6
PA8111	Jack Terminator™ with Punchdown Head-Set	Hubbell® - HXJ Series
PA3717	Replacement Punchdown Head-Set	Hubbell® - HXJ Series
PA8112	Jack Terminator™ with Punchdown Head-Set	Ortronics® - TJ5E00, TJ600, TJ610
PA3718	Replacement Punchdown Head-Set	Ortronics® - TJ5E00, TJ600, TJ610

## All-in-One UTP Snagless Crimper



PA1561



- Cuts and strips round or flat cable
- All metal construction
- Cushion grips for improved comfort and control
- For standard and "snagless" RJ45 connectors
- Also crimps RJ11/22 and RJ22 WE/SS style plugs

CAT. NO.	DESCRIPTION
PA1561	All-in-One UTP Snagless Crimper

## All-in-One Ultra Telephone Tools



PA901014



- 4 crimp functions with a single tool without changing dies
- Crimps 4- position RJ22 handset
- Crimps 4- and 6- position RJ11/RJ12 connectors
- Crimps 8- position RJ45 (non-keyed)
- Embedded cable cutter and stripper
- Crimps 28-24 AWG (.08 - .20 mm<sup>2</sup>) telephone and data cables
- Advanced ratchet system
- Precision die-cast aluminum head
- Crimps 6- position RJ11-DEC offset type connectors (P/N 901014)

CAT. NO.	DESCRIPTION
PA901014	All-in-One Ultra Telephone Tool AMP (Tyco)
PA901016	All-in-One Ultra Telephone Tool (WE/SS)
PA2530	Replacement blade kit

## All-in-One Pro Telephone Tools



PA1530R



- Crimps 4- position RJ22 connectors
- Crimps 4- and 6- position RJ11/RJ12 connectors
- Crimps 8- position RJ45 (non-keyed) connectors
- Embedded cable cutter and stripper
- Crimps 28-24 AWG (.08 - .20 mm<sup>2</sup>) telephone and data cables
- Comfortable rubber-embedded handles
- Built-in safety ratchet release

CAT. NO.	DESCRIPTION
PA1540	All-in-One Pro Telephone Tool AMP (Tyco)
PA1530R	All-in-One Pro Telephone Tool (WE/SS)
PA2530	Replacement blade kit

## Telephone Ratchet Crimper



**45553**  
Typically used for Modular Plug Connectors  
(See below)



**45575**  
Typically used for Modular Plug Connectors  
(See below) Our Telephone Ratchet Crimper  
was designed with a compact head to fit into  
tight spaces and ergonomic handles for opera-  
tor comfort.

- Combination tool terminates 8- position, 6- position and 4- position (45575 only) modular style plugs
- No need to change crimping dies
- Full-cycle ratchet mechanism provides consistent, quality terminations every cycle
- Straight action ensures uniform crimp
- Small, compact design
- Built-in wire cutter and stripper for flat cable
- All-steel frame has rust-resistant, black oxide finish

CAT. NO.	UPC NO.	DESCRIPTION
45553	45553	Telephone Ratchet Crimper
45575	45575	Telephone Ratchet Crimper

## Modular Plug Connectors

RJ45



### RJ45

- RJ45 8-conductor modular plugs
- 50 micron gold plating
- Meets or exceeds EIA/TIA specifications

### RJ11

- RJ11 6-conductor modular plugs
- For use with stranded wire
- 50 micron gold plating

### WE/SS-STYLE 8P8C CONNECTORS

CONNECTOR TYPE	CABLE TYPE	QUANTITY	CAT. NO.
RJ45	Cat5e, Solid or Stranded	10/Pack	PA9546
	Round, Flat or Oval	50/Pack	PA9655
		100/Pack	PA9549

RJ11



### WE/SS-STYLE 6P6C CONNECTORS

DESCRIPTION			
CONNECTOR TYPE	CABLE TYPE	QUANTITY	CAT. NO.
RJ11	Solid or Stranded	10/Pack	PA9520
	Round, Flat or Oval		

## EK50ML Micro Crimping Tool

**NEW  
PRODUCT**



- Ergonomic; total weight less than 2.2 lbs
- Crimp 3x faster with 90% less force
- LED work light
- 65% faster crimping cycle vs ratcheting tool.
- 250 crimps per cycle charge when crimping 10AWG wire.
- Patented Jaw Actuation for crimping cycle
- Innovative trigger with PowerSense™ Technology
- Overmolded grip for maximum comfort
- 10.8V Li-Ion battery with charge indicator

### SPECIFICATIONS

**Weight** 2.2 lbs (1 kg)

CAT. NO.	UPC NO.	DESCRIPTION
<b>N</b> EK50ML12011	03105	Crimping tool kit with 12mm jaw and 110V charger with carrying case
<b>N</b> EK50ML13811	03108	Crimping tool kit with 13.8mm jaw and 110V charger with carrying case
<b>N</b> EK50ML12022	03123	Crimping tool kit with 12mm jaw and 230V charger with carrying case
<b>N</b> EK50ML13822	03124	Crimping tool kit with 13.8mm jaw and 230V charger with carrying case
<b>N</b> EK50ML120B	03128	12mm jaw EK50ML bare tool
<b>N</b> EK50ML138B	03130	13.8mm jaw EK50ML bare tool
<b>R</b> MBP108	03127	10.8V EK50ML Li-Ion Battery
<b>R</b> MBC110	03125	10.8V EK50ML Li-Ion Battery Charger, 110V
<b>R</b> MBC230	03126	10.8V EK50ML Li-Ion Battery Charger, 230V
<b>R</b> EK50MLCASE	03131	EK50ML Carrying Case

Note: EK50ML138 is compatible with all Greenlee Kwik Cycle® and CrimpALL® dies for various types of cables and sizes.

See page 375-377 for the complete line of dies.

### COMPATIBLE DIE SETS

	Wezag®	Panduit®	Thomas & Betts®	Ideal®
<b>EK50ML120</b>	CS30, CS150	CT-2600,CT-300	Sta-Kon®	
<b>EK50ML138</b>				Crimpmaster™

## CrimpALL® 8000 Series Crimpers

**LIFETIME WARRANTY**



- Ultra-smooth, fully ratcheting crimp cycle with built-in safety release
- Interchangeable die sets of heat-treated steel for long life
- Soft, rubber-embedded handles
- Long-lasting tool that delivers over 50,000 crimp cycles.
- Rugged, double-plated jaw design to increase life span.
- Lifetime warranty on tool; one-year on die sets
- Angled head to prevent awkward wrist bending during operation
- Reduced handle grip distance makes it easy for both small and large hands
- Higher crimp force produced with less hand force so hand doesn't tire as quickly
- No breakover hand force – the effort required by most crimpers to make the last click at the end of the cycle to complete the crimp – the CrimpALL does the work
- Manufactured using the newest fine blanking technologies.
- EZI-Change™ die screws make changing dies quick and easy – no screwdriver required

### CAT. NO. DESCRIPTION

PA8000	CrimpALL® tool frame
<b>R</b> PA2303	Replacement EZI-Change™ die screws (2)

## 1300 Series Crimpers



PA1302

- Fully-ratcheting cycle with built-in safety release
- Interchangeable die sets of heat-treated steel for long life
- Easy to use and maintain
- Available as complete tool with die set inserted or separate tool frame and individual die sets
- Foam-lined case available to hold frame and 6 die sets together.
- Lifetime warranty on tool; one-year on die sets
- EZI-Change™ die screws make changing dies quick and easy – no screwdriver required
- Most precise and tightest tolerances on die sets in the industry
- Six ratchet gear settings for optimum crimp performance

CAT. NO.	DESCRIPTION
PA1302	Crimp tool frame
<b>R</b> PA2303	Replacement EZI-Change™ die screws (2)
<b>R</b> PA2346	Replacement Spring

## CrimpALL® Interchangeable Die Sets for Modular Plugs














DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
RJ45 - 8P8C (8 Pin)	Flat/Round, Solid/Stranded	RJ45 Unkeyed WE and SS	PA8030 PA1307	PA2061	Western Electric (WE)/Stewart Connector (SS)	
RJ11 & RJ12 - 6P6C, 6P4C, 6P2C	Flat/Round, Solid/Stranded	RJ11 & RJ12 Unkeyed WE and SS	PA8031 PA1340	PA2062	Western Electric (WE)/Stewart Connector (SS)	
RJ22 Handset - 4P4C (4 Pin)	Flat/Round, Solid/Stranded	4 Pin Handset WE and SS	PA8032	PA2063	Western Electric (WE)/Stewart Connector (SS)	
RJ45 - 8P8C (8 Pin)	Flat/Round, Solid/Stranded	RJ45 Unkeyed AMP	PA8033 PA1342	PA2064	AMP (Tyco) Inc. Connectors Only	
RJ50 - 10P10C (10 Pin)	Flat/Round, Solid/Stranded	RJ50 Unkeyed WE and SS	PA8036 PA1345	PA2068	Virginia Plastics (VP)	
British Telecom 6 Pole Plug	Flat/Round, Solid/Stranded	BT 6 Pole		PA2032	British Telecom Plugs Only	
RJ45, AMP/Molex Connectors for dia. Cable	6.0mm Dia. Round, Shielded (STP)	RJ45 STP AMP & Molex, 6.0mm dia. cable		PA2674	AMP (Tyco) Inc. & Molex	

## CrimpALL® Interchangeable Die Sets for Specialty Crimpers

DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
RJ45 WE/SS & RG6/RG6 Quad CATV "F"	UTP 4-Pair & RG6/ RG6 Quad	RJ45 WE/SS 8-pin & 0.360" (9.1mm) HEX/0.324" (8.2mm) HEX	PA8045 PA1387	PA2687	For standard RJ45 WE/SS Modular Plugs & 1-piece RG6/RG6 Quad CATV "F" conns.	

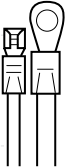


## CrimpALL® Interchangeable Die Sets for Coaxial Connectors


DESCRIPTION			CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS
 RG58, RG59, RG62AU	BNC/TNC and 3 Piece	0.256" (6.5mm), 0.213" (5.4mm), 0.068" (1.7mm) HEX	PA8001 PA1317	PA2034	Common 2-piece and 3-piece BNC/TNC
 RG174, RG59/62, mini-coaxial 75-ohm	HDTV SMA, True 75-ohm BNC/TNC, Mini-UHF	0.255" (6.5mm), 0.197" (5.0mm), 0.178" (4.5mm), 0.068" (1.7mm) HEX & 0.042" (1.0mm) SQ	PA8002 PA1366	PA2648	Common 2-piece and 3-piece BNC/TNC (Kings, ADC, Amphenol, etc.)
 RG59, RG6, Belden 8281, Belden 1694A	HDTV BNC/TNC/CATV "f" True 75-ohm	0.324" (8.2mm), 0.255" (6.5mm), 0.068" (1.7mm) HEX & 0.052" (1.3mm), 0.042" (1.0mm) SQ	PA8003 PA1367	PA2649	Common 2-piece and 3-piece BNC/TNC (Kings, ADC, Amphenol, etc.)
 RG6, Belden 1694, Belden 1694A	HDTV BNC/TNC True 75-ohm	0.278" (7.0mm), 0.275" (6.9mm), 0.068" (1.7mm) HEX & 0.042" (1.0mm) SQ	PA8004 PA1368	PA2657	Common 3-piece BNC/TNC (Kings & ADC HDTV)
 RG58, Mini-59, RG-174, small coaxial	SMA, SMB, Mini-59 BNC/TNC, Mini-UHF	0.128" (3.2mm), 0.213" (5.4mm), 0.197" (5.0mm), 0.178" (4.5mm), 0.068" (1.7mm) HEX & 0.042" (1.0mm) SQ	PA8005 PA1363	PA2653	Common 2-piece and 3-piece SMA/SMB/BNC/TNC & Mini-UHF
 RG58, RG174, AT&T 735, 50 and 75-ohm	Thinnet, BNC/TNC, Mini-UHF	0.213" (5.4mm), 0.178" (4.5mm), 0.068" (1.7mm) HEX & 0.042" (1.0mm) SQ	PA8006 PA1335	PA2046	50/75 ohm small 2-piece & 3-piece BNC/TNC (Kings, ADC, etc.)
 RG59, RG62, Belden 8281, 50 and 75-ohm	BNC/TNC and Mini-UHF	0.315" (8.0mm), 0.252" (6.4mm), 0.068" (1.7mm), HEX 0.042" (1.0mm) SQ	PA8007 PA1336	PA2047	75 ohm 2-piece & 3-piece BNC/TNC (Kings, ADC, Amphenol, etc.)
 RG174, RG179 and Small Cable Connection	BNC/TNC	0.178" (4.5mm), 0.128" (3.2mm), 0.068" (1.7mm) HEX	PA8008 PA1338	PA2051	Common 2-piece and 3-piece BNC/TNC/SMA/SMB
 RG6 and RG6 Quad, Belden 1694A	BNC and CATV "F" Type & HDTV	0.360" (9.1mm), 0.324" (8.2mm), 0.068" (1.7mm) HEX	PA8012 PA1356	PA2045	Common 2-piece and 3-piece BNC/TNC and CATV "F" 2-piece
 RG59, RG6 Video Cable	CATV "F" Type	0.346" (8.8mm) 0.319" (8.2mm), 0.256" (6.5mm) HEX	PA8013 PA1328	PA2042	Crimps Ferrules or Sleeves Only
 RG8, RG11, RG213	N-Type	0.429" (10.9mm), 0.100" (2.54mm), 0.080" (2.03mm) HEX	PA8014 PA1365	PA2656	Common 2-piece and 3-piece "N"-Type (Kings, ADC, Amphenol, etc.)
 RG8, RG11, RG213, RG216	N-Type, MS39012 Type	0.415" (10.5mm), 0.095" (2.4mm) HEX	PA8015 PA1319	PA2039	Crimps Pins and Ferrules
 Belden 1855A, 1865A, 1505A, 1505F, 1694A, 1694F, 179DT	HDYV BNC/TNC True 75-ohm	0.178" (4.5mm), 0.255" (6.5mm), 0.278" (7.0mm), 0.068" (1.7mm), 0.041" (1.0) HEX	PA8049 PA1389	PA2699	Kings, ADC, B&L, Trompeter, Amphenol, Switchcraft

Teflon® is a registered trademark of Dupont


## CrimpALL® Interchangeable Die Sets for Insulated Terminal Crimpers

DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
	Insulated Terminals and Lugs	Solid or Stranded Wire, 22-10 AWG (.34 - 6 mm <sup>2</sup> )	12-10 (Yellow), 16-14 (Blue), 22-18 (Red), (6-4 / 2.5 - 1.5 / .34 - .75 mm <sup>2</sup> )	PA8021 PA1305	PA2035	For Large Professional Terminals (Panduit, T & B, etc.)
	Insulated Terminals and Lugs	Solid or Stranded Wire, 22-12 AWG (.34 - 4 mm <sup>2</sup> )	12-10 (Yellow), 16-14 (Blue), 22-18 (Red), (4/1.5 - 2.5 / .34 - .75 mm <sup>2</sup> )	PA8022 PA1308	PA2040	For Standard Commercial Terminals (Hardware Store Brands)
	Insulated Terminals and Lugs	Solid or Stranded Wire, 26-14 AWG (.10 - 2.5 mm <sup>2</sup> )	16-14 (Blue), 22-18 (Red), 22-26 (Yellow) (1.5 - 2.5 / .34 - .75 / .34 - .10 mm <sup>2</sup> )	PA8023 PA1334	PA2029	For Smaller Wire Barrel Terminals


## CrimpALL® Interchangeable Die Sets for Non-Insulated Terminal Crimpers

DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
	Non-Insulated Terminals and Lugs	Solid or Stranded Wire, 22-8 AWG (.34 - .10 mm <sup>2</sup> )	10-8 / 14-12 / 18-16 / 22-20 (6 - 10 / 2.5 - 4 / .75 - 1.5 / .34 - .50 mm <sup>2</sup> )	PA8024 PA1322	PA2031	For Standard Commercial Terminals

## CrimpALL® Interchangeable Die Sets for Open Barrel, Box and Terminal Systems

DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
	Open Barrel Non-Insulated Terminals, Narrow Lugs and Power Contacts	Solid or Stranded Wire, 22-10 AWG (.34 - 6 mm <sup>2</sup> ), F Type*	22-18 / 16-14 / 12-10 (.34 - .75 / 1.5 - 2.5 / 4-6 mm <sup>2</sup> )	PA8026 PA1306	PA2033	For Standard Commercial Terminals
	Open Barrel Non-Insulated Terminals, Wide Lugs and Power Contacts	Solid or Stranded Wire, 22-14 AWG (.34 - 2.5 mm <sup>2</sup> ), F Type*	16-14 / 22-18 (1.5 - 2.5 / .34 - .75 mm <sup>2</sup> )	PA8027	PA2096	For Standard Commercial Terminals
	Open Barrel D-Sub Contact Pins RS-232	Solid or Stranded Wire, 28-20 AWG (.08 - .50 mm <sup>2</sup> ), F Type*	28-24 / 22-20 (.08 - .2 / .34 - .5 mm <sup>2</sup> )	PA8029 PA1359	PA2097	For Standard D-sub Pins Only; not for HD D-sub

## CrimpALL® Interchangeable Die Sets for Wire Ferrules

DESCRIPTION				CAT. NO.	CAT. NO.	
CABLE TYPE	CONNECTION	CRIMP SIZES	TOOL WITH DIE	DIE ONLY	REMARKS	
	Insulated & Non-Insulated Wire Ferrules	Solid or Stranded Wire, 22-10 AWG (.34 - 6 mm <sup>2</sup> )	22-20 / 18-16 / 14-12 / 10 (.34 - .55 / .75 - 1.5 / 2.5 - 4 / 6 mm <sup>2</sup> )	PA8025 PA1360	PA2095	For DIN or US Type Wire Ferrules

### D-sub Indent Crimpers



PA1460

- Adjustable Pin Height Locator
- Cushion Grips for comfort

CAT. NO.	DESCRIPTION
PA1460	D-sub 4 Indent Crimper 26-20 AWG
PA1461	D-sub 4 Indent Crimper 20-12 AWG
PA1462	D-sub 8 Indent Crimper 26-20 AWG

### Electrical Terminal Crimper



PA1176

- D-sub Pins & Sockets 26-28 AWG
- Butt-Insulated Connectors 22-26 AWG
- Telephone Piercing Spade Lugs 22-26 AWG
- Open Barrel Connectors 14-18, 20-22 AWG

CAT. NO.	DESCRIPTION
PA1176	Multi-Purpose Electrical Terminal Crimper

### EDAC/ELCO Crimper



PA1670

Pin locators



- Crimp tool for broadcast professionals terminating loose 28-18 AWG (.08-75 mm<sup>2</sup>) EDAC and ELCO rack and panel open barrel contacts
- Crimps EDAC pins 516-290-590 & 516-290-591 along with ELCO pins 000-60-8017-03-13
- Embedded pin locators properly align pins to ensure accurate, reliable crimping
- Fully-ratcheted to prevent under crimping
- Requires low hand force and provides superior crimp force
- True ergonomic design for extreme comfort and performance
- Non-slip, soft rubber handles
- Double-plated for extended long-life and crimping accuracy
- Factory-calibrated and set for precision

#### SPECIFICATIONS

**Weight** 19 oz. (538 g)

CAT. NO.	DESCRIPTION
PA1670	EDAC/ELCO Crimper

## Open Barrel Contact Pin Crimper



PA1645

Professional crimping tool for open-barrel box and round connector contacts with a wire range of 30-18AWG (0.05-.75 mm<sup>2</sup>)

- Precision fixed dual-plate dies for crimp accuracy
- Crimps non-insulated terminal lugs, cable lugs and parallel and serial splices or "F-Type"
- Works with Molex, Waldom & Leoco-type connectors
- Durable steel construction for long life
- Rubber-embedded ergonomic handles for low-effort operation

### SPECIFICATIONS

<b>Weight</b>	14 oz. (400 g)
<b>Range</b>	Small: 30-24 AWG (0.05-.20 mm <sup>2</sup> ) Medium: 22-18 AWG (.34-.75 mm <sup>2</sup> )

CAT. NO.	DESCRIPTION
PA1645	Open Barrel Contact Pin Crimper

## Open Barrel Contact Pin Crimper



PA1631

Professional crimping tool for open-barrel box and round connector contacts with a wire range of 24-14 AWG (0.2-2.5 mm<sup>2</sup>)

- Precision fixed dual-plate dies for crimp accuracy
- Built-in locator
- Crimps non-insulated terminal lugs, cable lugs and parallel and serial splices or "F-Type"
- Works with Molex, Waldom & Leoco-type connectors
- Durable steel construction for long life
- Rubber-embedded ergonomic handles for low-effort operation

### SPECIFICATIONS

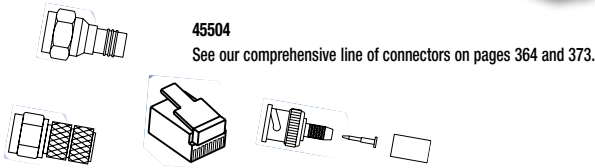
<b>Weight</b>	14 oz. (400 g)
<b>Range</b>	Small: 24-22 AWG (0.05-.20 mm <sup>2</sup> ) Medium: 18-14 AWG (.34-.75 mm <sup>2</sup> )

CAT. NO.	DESCRIPTION
PA1631	Open Barrel Contact Pin Crimper

### Kwik Cycle® 9" Crimp Frame



- Used to manually crimp a wide variety of connectors and terminals to factory specifications
- Frame features a precision full-cycle ratchet for accurate, repeatable crimps every cycle
- Crimp release lever improves throughput by eliminating rejected terminations due to improper connector positioning
- Frame features a tension adjustment preset at the factory for optimum performance
- High-leverage force and ergonomically-designed handle provides comfortable use
- Frame and dies are manufactured from heat-treated, hardened tool steel for superior function and long life
- All die sets are easily interchangeable with a simple screwdriver.



45504  
See our comprehensive line of connectors on pages 364 and 373.

CAT. NO.	UPC NO.	DESCRIPTION
45504	45504	Kwik Cycle 9" Crimp Frame

### Kwik Cycle® 9" Interchangeable Die Sets for Insulated & Non-Insulated Terminals

DESCRIPTION		CAT. NO.		UPC NO.	
CONNECTION	FEATURES	TOOL WITH DIE	DIE ONLY		
22-10 AWG	Color Coded nests for easy identification Standard insulated terminals, ring tongue, spade lug, slide on and butt splices	45500	45500	45509	45509
22-10 AWG	Color Coded nests for easy identification for fully insulated slide-on style connectors AMP Ultrafast™ style	45501	45501	45570	45570
26-16 AWG	For mini insulated terminals with smaller wire barrels. Ring tongue, spade, slide on and butt splices			45565	45565
22-8 AWG	For non-insulated terminals and splices	45505	45505	45507	45507



## Heat Gun



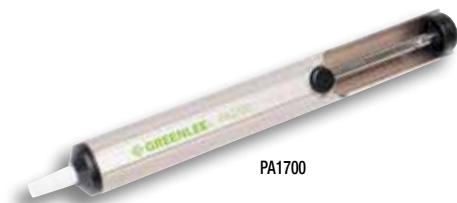
- Electronic variable heat control ranging from 250-1100° F (120-590° C)
- Two speeds: high & low
- Double insulation safeguards injury from possible electrical failure inside gun
- Comfortable, lightweight design reduces operator fatigue
- Three nozzles included: window nozzle, deflection nozzle and .47" (12 mm) focusing nozzle
- UL listed

### SPECIFICATIONS

Power reqs.	120VAC 60 Hz
Current draw	7.5 amps max.
Power cons.	1200 watts max.

CAT. NO.	DESCRIPTION
PA1873	Heat gun

## Desoldering Tools



- Removes solder with simple push-button operation
- Standard (regular & anti-static) replacement tips available
- Repair kits come complete with replacement spring and suction rods
- Durable metal frame

### CAT. NO. DESCRIPTION: DESOLDERING TOOLS

PA1700	Desoldering tool (standard)
<b>R</b> PA2712	Standard replacement tip

## Cable Tie Gun



- For use with plastic cable ties up to 0.25" (6.35 mm) in width
- Neatly fastens and cuts in one action
- Adjustable tension for changing cable bundle pressure
- Automatic cable tie cut off

### CAT. NO. DESCRIPTION

PA1828-1	Cable tie gun
----------	---------------

*Note: Leaves 1 mm tab of lock after cut is made.*

## Kwik Cycle® Cable Tie Guns



- Tension adjustment allows the user to adapt the tool to the size of the tie
- Automatic cut-off eliminates sharp edges on ties

### CAT. NO. UPC NO. DESCRIPTION

45306	45306	Standard Cable Tie Gun
45300	45300	Heavy-Duty Cable Tie Gun

# HDMI TOOLS



A PRODUCT VIDEO IS AVAILABLE, SCAN THIS QR CODE OR VISIT:

[www.youtube.com/GreenleeDEMO](http://www.youtube.com/GreenleeDEMO)

## HDMI®\* HDFT™ Cable Prep Tool



PA1192

- Use with Greenlee® 24 AWG HDFT™ cable & connectors
- Cuts 24 AWG HDFT™ cables, strips outer jacket and twisted pair shielding
- Curved blade for cutting HDMI®\* and HDFT™ cables
- Precision stripping cavity for removing outer jacket on 24 AWG HDFT™ cables
- Exclusive cavity for removing twisted pair shielding on 24 AWG HDFT™ cables

CAT NO.	UPC NO.	DESCRIPTION
PA1192	00072	Cable Prep Tool

## 24 AWG HDMI®\* Field Terminating Cable



FTHD24-100

- Use with Greenlee® HDFT™ Connectors
- Make premium HDMI®\* High Speed with Ethernet cables
- Supports HDMI®\* 1.4 features: 3D, Ethernet and Audio Return
- 100' 24 AWG HDFT™ cable
- Solid-core long grain copper
- Fifth twisted pair for Ethernet and audio return
- Other HDMI®\* 1.4\*\* features supported: 10.2 Gbps Data Rate, 3D Video Formats, Deep Color and 4k x 2k Resolution

CAT NO.	UPC NO.	DESCRIPTION
FTHD24-100	00079	100' 24 AWG Field Terminating Cable

## HDMI®\* Field Terminating Connectors



HDCN24-10

- Make custom length, premium HDMI®\* cables
- Eliminates cable clutter
- Costs less than pre-terminated cables
- 10 or 50 pack – 24 AWG HDFT™ Connector Components
- Use With Greenlee® 24 AWG HDMI®\* Field Terminating Cable only
- Includes main connector terminal block and wire guides
- Guides are mated and colorcoded for 24 AWG HDMI®\* Field Terminating cable
- Make custom length, premium HDMI®\* High Speed with Ethernet cables

CAT NO.	UPC NO.	DESCRIPTION
HDCN24-10	00073	Field Terminating Connectors (10 Pack)
HDCN24-50	00074	Field Terminating Connectors (50 Pack)

\*HDMI Equivalent

HDMI®\* Registered trademark of HDMI Licensing, LLC

HDFT™ Trademark owned by the Quest Group

## HDFT™ Pro Deluxe Kit



PA4017

- Make custom length, premium HDMI®\* cables
- Eliminates cable clutter
- Costs less than pre-terminated cables

**14 Piece Kit Includes:**

- 1) PA1192 HDMI®\* HDFT™ Cable Prep Tool
- (1) PA8700 HDMI®\* HDFT™ Termination Tool
- (10) HDCN24-10 HDMI®\* Field Terminating Connectors
- (1) PA1175 Media Cable Cutter
- (1) TC-30 Deluxe Carrying Case

CAT NO.	UPC NO.	DESCRIPTION
PA4017	00099	Pro Deluxe Kit

## HDFT™ Pro Kit



PA4019

**12 Piece Kit Includes:**

- (1) PA1192 HDMI®\* HDFT™ Cable Prep Tool
- (1) PA8700 HDMI®\* HDFT™ Termination Tool
- (10) HDCN24-10 HDMI®\* Field Terminating Connectors

CAT NO.	UPC NO.	DESCRIPTION
PA4019	00101	Pro Kit

## Pro HDMI® Cable Tester



PA1599

- 14 LED readout for easy checking
- Sweep function checks for crossed wires
- 9V battery included

CAT NO.	UPC NO.	DESCRIPTION
PA1599	00075	Pro Cable Tester

## HDFT™ Die Set



PA4003

- Precision cast 4140 steel for durability
- High tensile steel cutting blades for long life
- Error-proof design avoids misalignment

CAT NO.	UPC NO.	DESCRIPTION
PA4003	00098	Die Set

\*HDMI Equivalent  
 HDMI®\* Registered trademark of HDMI Licensing, LLC  
 HDFT™ Trademark owned by the Quest Group

# NOTES