



**IDEAL INDUSTRIES  
NETWORKS**



**Full range of products for cable  
installation, networks management  
and WAN access**

# Product Catalogue





## About Us

### Background

Welcome to the IDEAL INDUSTRIES NETWORKS product catalogue. This is your guide to the most comprehensive range of portable test equipment, installation tools, accessories and consumables for all copper & fibre cable installation, network maintenance & troubleshooting and access telecom testing.

IDEAL INDUSTRIES NETWORKS is a new name but comes with many years of experience in network test and installation. Through the merger of IDEAL Datacomm and Trend Communications, IDEAL INDUSTRIES NETWORKS has been born. It is the only supplier of portable test equipment with true heritage and expertise in both Local Area Network AND Wide Area Network installation and maintenance.

### Focus on Network Installation and Troubleshooting

In this modern world, our dependency on network performance is becoming more and more critical. At the same time, bandwidth demand is increasing at a huge rate, overloading existing infrastructure and increasing the frequency of breakdowns. This means that the quality of cable installation and maintaining network performance is becoming increasingly important. Bad quality installation or poor network performance costs businesses money in today's world. There are many options available to address this but they can be expensive, very complex or too basic to meet the requirements. IDEAL INDUSTRIES NETWORKS provides a range of solutions for WAN & LAN installation and maintenance which meets the highest technical demands, whilst offering products which are flexible, easy to use at an affordable cost.

### High Quality Solutions

IDEAL INDUSTRIES NETWORKS provides test solutions for LAN cable installers, network technicians, IT managers, Telecoms operators and service providers. The range includes copper cable testers, Cat 5 to Cat7A cable certifiers, OTDRs, 1 GbE testers, xDSL testers, network troubleshooting tools and more. There is a high quality test solution to meet the needs of most users. Our focus is on delivering products which test to the very latest standards and highest technical requirements but do not require a professor to use them. Designed to ensure accuracy of results is achieved with easy to use interfaces, they ensure the job is done faster and right first time ultimately, saving money.

As well as testers, IDEAL INDUSTRIES NETWORKS also provides a comprehensive range of installation products and materials. There is a large range of copper cable and fibre preparation tools, connectors, fishtapes and lubricants to help make any installation job easier and quicker. This catalogue is a one-stop-shop for all LAN/WAN installers, maintenance technicians and network managers.

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## ***COPPER CABLE AND FIBRE INSTALLATION TEST AND CERTIFICATION***

The IDEAL INDUSTRIES NETWORKS range of Installation, Test and Certification products covers all of the requirements of the installer of both copper cable and fibre optics. From pulling lubrication and rods, a full range of connectors, tools for cable and fibre preparation, through to testers and certifiers to ensure correct installation and warranty certification.



# **Copper Cable and Fibre Installation Test and Certification**

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Easily measure fibre optic power in milliwatts (mW) and decibel-milliwatts (dBm) to test and troubleshoot active LANs

### **Other Fibre Products ..... 26**

Explore our range of power meters, light sources and other fibre testers.



# ***COPPER CABLE TESTING AND CERTIFICATION***



IDEAL INDUSTRIES NETWORKS copper cable testers are essential tools for any cable installer or network technician. In today's LAN environment, performance is crucial to the quality of service delivered to the customer. Whether through poor installation, cable damage or a bad connection, the majority of network issues come from one form of cabling fault or another. Without the right test equipment, identifying and locating the problem can be time consuming and expensive. The IDEAL INDUSTRIES NETWORKS copper test range has solutions from basic wiremappers to qualifiers to test correct cable installation through to bandwidth capability.

On top of this, more and more premises owners are requiring a documented record that installations meet the latest cabling test

standards. Certain cable manufacturers also offer a warranty for their cabling when installed and tested using an approved certifier. The LanTek® II range is one of only a very few cable certifiers available today approved by key cable manufacturers testing up to 1000 MHz and certifying cabling up to the highest Cat. 7A ISO Class FA standard.

Through accuracy of testing, easy to use interface and features designed to test the real application needs of the user, IDEAL INDUSTRIES NETWORKS copper test products help to significantly speed up cable installation and fault finding, reducing downtime and saving money.

## Copper Cable Testing and Certification Range



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	<b>LanTEK® II</b>	<b>SignalTEK™</b>	<b>VDV PRO</b>	<b>VDV MM</b>	<b>IENet™ PRO</b>
<b>Cable certification to international standards</b>	✓				
<b>Ethernet cable qualification</b>		✓			
<b>Supported standards</b>	350 MHz – Class E/Cat 6, 500 MHz – Class EA/Cat 6A, 1000MHz – Class FA/ Cat 7A	IEEE Ethernet	TIA 586 wiremap	TIA 586 wiremap	TIA 586 wiremap
<b>Accuracy level</b>	ISO/IEC 61935-1 Level III, IIIe, IV				
<b>Fault finding and continuity testing</b>	✓	✓	✓	✓	✓
<b>Supported interfaces</b>	RJ-45, TERA, GG45, EC7, BNC, 66 block, 110 block, M12 (adaptor)	RJ-45	RJ-45, RJ-11, coax (F)	RJ-45, RJ-11, coax (F)	RJ-45, M12, coax (adaptor), BNC (adaptor)
<b>Fibre testing option</b>	MM/SM attenuation and length	MM/SM Ethernet test with SFP			
<b>Industrial mode</b>	✓	✓			✓
<b>Documented test results</b>	✓	✓			



## LanTEK® II Cable Certifier Series

Superior performance, revolutionary fibre options and outstanding value makes LanTEK® II the ultimate cable certification platform. Choose from three models that provide the test capabilities you need today with cost-effective upgrades should these change tomorrow; choose from 350 MHz - Class E/Cat 6, 500 MHz - Class EA/Cat 6A or 1000 MHz - Class FA/Cat 7A all with accuracy verified by ETL. Productivity on the job is assured by 11-second Class D/Cat 5e and a 14-second Class E/Cat 6 autotest times that include full graphical data storage. Certification costs and efficiency are further improved by a patented universal adaptor system that lets you certify most cabling with off-the-shelf patch cords. This unique feature eliminates the need for proprietary permanent link adaptors.

The LanTEK® II series also offers ultimate versatility with options for Alien Crosstalk testing, certification of TERA, GG45 and EC7 Class F/FA / Category 7/7A, plus M12 Industrial Ethernet, and coaxial test adaptors.

The optional FiberTEK® FDX modules provide the world's only dual wavelength, bidirectional fibre certification for multimode, single mode and Gigabit applications that's 3 times faster than existing testers.

### More Ways to Save

**Save time and money in more ways than ever with LanTEK® II.**

#### Universal Link Testing

The patented testing process features universal test adaptors for ISO Class D/Category 5e through Class EA/Category 6A certification. Consequently, patch cords are typically the only item that needs to be replaced when worn out or damaged. This eliminates the expense of proprietary adaptors meaning more time is spent testing and less time searching for replacement parts.

#### Channel and Permanent Link Testing with One Adaptor

Only LanTEK® allows permanent link and channel certification without changing adaptors. The patented DualMODE function allows cabling to be certified to two different standards with one press of the Autotest button; less than half the time it would take with any other certifier.



### Features and Benefits

- Best price/performance options - models ranging from 350 MHz to 1000 MHz for Category 6/ISO E through Category 7A/ISO FA certification
- High speed testing saves time and money
- Most internal memory available - store over 1700 Category 6/ISO E tests with graphs
- Patented testing method - eliminate expensive permanent link adaptors and test with patch cords for most installation
- Extraordinary fast fibre testing with FiberTEK® FDX - the first dual wavelength, bidirectional fibre certification tool
- Large, ultra-bright display - 4.3 in. wide screen display with white LED backlighting provides easy viewing of high-frequency data plots
- 350 MHz & 500 MHz models are fully upgradable to 1000 MHz
- Smart lithium-ion battery technology - 18 hour battery life with self calibrating "fuel gauge" for accurate capacity readings
- Most versatile test adaptor range for RJ-45, TERA, GG45, EC7, Coax, M12
- Other interfaces are realized through hybrid patch cords from RJ-45 to e.g. RS232
- Level III, IIIe, IV accuracy according to ISO IEC 61935-1
- DualMODE function - certify to two different standards with one press of the Autotest button
- Maximum reporting power with the new IDEAL DataCENTER (IDC) software



## FiberTEK® FDX Fibre Test Module

### Time Saving Fibre Certification

The FiberTEK® FDX option allows users to add full Tier 1 standards compliant fibre certification capability to the LanTEK® II certifiers. Tier 1 certification utilises a light source and power meter to measure the power loss of optical cabling. FiberTEK® FDX modules incorporate dual light sources and a wide range power meter to allow loss testing of fibre links as well as to measure light levels emitted from active network equipment for troubleshooting.

### Simplified Testing

Unlike other fibre certification “add-ons” that require up to four separate steps to test each fibre at both wavelengths and in both directions, FiberTEK® FDX can accomplish this task in one easy step. FiberTEK® FDX revolutionises the whole fibre certification process by utilising a sophisticated full duplex optical module that allows each fibre to be certified in one go with no reversing of patch cords or swapping of optical modules. Four attenuation measurements plus length in one press of the Autotest button. The simplest way to certify fibre.

### FiberTEK® FDX Key Advantages

The only solution that allows complete one-step certification of horizontal and backbone cabling without swapping fibres or modules. Extremely fast fibre certification that complies with TIA/ISO/IEC certification standards. Available with both LED and VCSEL/laser multimode sources for 10/100Mbps or 1/10G certification. Real-time power meter to aid in troubleshooting active equipment. Field changeable adaptors (SC, ST, FC) eliminate the need to carry multiple hybrid launch cords.



LanTEK® II	
Description	Cat. No.
LanTEK® II-350: TIA/EIA Cat6, ISO Class E certifier w/ Cat6 adaptors	33-991
LanTEK® II-500: TIA/EIA Cat6A, ISO Class Ea certifier w/ Cat6A adaptors	33-992
LanTEK® II-1000: TIA/EIA Cat7A, ISO Class F/FA certifier w/ Cat6A adaptors	33-993
Contents: LanTEK® II display and remote handset, two smart lithium-ion batteries, two 110-240V power adaptors with US/EU/UK plugs, lockable semi-rigid carrying case, Cat6A F/FTP patch cords, USB cable, DataCENTER data management and reporting software, two headsets, hanging straps, and ETL accuracy certificate.	
FiberTEK® FDX	
Multimode (850/1300nm) kit with LED light sources for standard multimode fibre, 850nm LED, 1300nm LED	33-990-FA01
Multimode (850/1300nm) kit with VCSEL/laser light sources for laser optimised fibre, 850nm VCSEL, 1300nm FP laser	33-990-FA02
Single mode (1310/1550nm) kit with laser light sources for single mode fibre, 1310nm FP laser, 1550nm FP laser	33-990-FA03
Combination MM/SM kit with LED MM sources and laser SM sources (33-990-FA01 & 33-990-FA03)	33-990-FA04
Combination MM/SM kit with VCSEL/laser MM sources and laser SM sources (33-990-FA02 & 33-990-FA03)	33-990-FA05
Contents: Two FiberTEK® FDX modules, lockable semi-rigid carrying case, SC, FC, ST adaptors for modules (2 ea), SC-SC patch cords (MM kits: 3x 62.5µm, 3x 50µm; SM kits: 3x 9µm) compliant to ISO/IEC 14763-3 standard, quick reference guide, and electronic operation manual.	
Accessories	
Lithium-ion Battery	33-990-BP01
Category 6A/Class EA Universal Channel/Permanent Link Adaptor	0012-00-0656
Category 6/Class E Universal Channel/Permanent Link Adaptor	0012-00-0629
Replacement Category 6A F/FTP Patch Cord	6011-50-0001
Replacement Power Supply	33-990-PS01
Replacement Talk Set	33-990-TS01
USB Cable	33-990-DC01
Large Carrying Case	33-990-CC01
Cat7/7A ISO - F/FA EC7 testing kit	0012-00-0653
Coax Testing Kit	1019-00-0343
LANTEK 10 Gigabit Alien Crosstalk Testing Kit	LANTEK10GBKIT

Trade-in and upgrade options available. For more information please visit [www.idealnwd.co.uk](http://www.idealnwd.co.uk)



<b>LanTEK® II</b>	
Handset Dimensions	Height/Width/Depth: 10in/5in/2.1in (25.4cm/12.7cm/5.3cm)
Handset weight w/ battery	Display: 2.4lbs/1.1kg; Remote: 2.3lbs/1.0kg
Battery	Lithium-ion, 7.4VDC, 6.6AH; Input: 12V/2A DC; Typical operating time: 18 hours (new battery running a Cat6 test every 2.5 minutes, full backlight); Charge time: 4 hours quick charge with battery removed from handset, 6 hours inside handset.
Input power	Handset: DC 12-15V, 2A; Line/mains power: AC 110-240V
Display	4.3" wide screen TFT, 480 x 272 pixel, 95 x 54mm viewable area
Connectivity	Adaptor port: 168 pin ultra low crosstalk, mini-USB device port, USB host port (display handset only), four pin serial port (service use only), 1/8" talkset jack, power/charging jack
Frequency range	LanTEK® II-350: 1-350MHz, LanTEK® II-500: 1-500MHz, LanTEK® II-1000: 1-1000 MHz
Memory	Non-volatile flash, storage capacity for 1700 TIA-Cat 6 tests with graphs. Tests can be copied to USB flash drive, up to 64GB.
Measurements	Wiremap, DC loop resistance length, capacitance, NEXT, insertion loss (formerly attenuation), ACR-N (formerly ACR), return loss, average impedance, propagation delay, delay skew, power sum NEXT, power sum ACR-N (formerly power sum ACR), ACR-F (formerly ELFEXT), power sum ACR-F (formerly power sum ELFEXT), alien crosstalk (with optional AXT testing kit)
Length measurement	0-605m; +3% (+1), display resolution: 0.1m
Supported cable types	TIA/EIA Category 3, 4, 5, 5e, 6 and 6A: 1000 ISO/IEC Class C, D, E, EA, F, FA: 1000 Cat 6/6A Class E/Ea RJ-45 permanent link adaptors: shielded and un-shielded cable, universal adaptors provide channel, permanent link and basic link measurements.
Supported connectors	Additional adaptors: GG45, RJ-45, TERA, EC7 (MMCPRO3000), Coax 50-750 (BNC connector), M12 industrial
Tone generator	Integrated into display and remote handset, compatible with standard analogue inductive probes, selectable tone (high/low/warble) 500/600 Hz, selectable pin output.
Input protection	100V @ 25mA
Operating temperature	0°C to 50°C, non-condensing
Storage temperature	-20°C to 70°C, non-condensing
Vibration/shock	MIL-PRF-28800 F, Class 3
Supported languages	Chinese, Czech, Danish, Dutch, English, French, German, Italian, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish
Accuracy	Baseline: Certified by ETL to meet IEC 61935 Level III/IIIe/IV; Channel/Permanent link: TIA 568-B.2-2 and IEC 61935 Level III/IIIe/IV
Warranty (LanTEK® II/ FiberTEK FDX)	One (1) Year from date of purchase Batteries and accessories are warranted 90 days from date of purchase
PC Software	Requirements: Microsoft Windows® XP or Vista, 512MB RAM, 500MB hard disk + 1GB for every 1,500 Category 6 tests
<b>FiberTEK®FDX</b>	
Compatibility	LanTEK® II (any model)
Connector	User changeable adaptor (SC, FC, ST), 2.5mm ferrule
Laser safety	Multimode 850 VCSEL: class 3, 5mW max; multimode 1300 laser: class 3, 5mW max; Single mode 1310 & 1550: class: 3, 5mW max
Power meter accuracy	± .5dB from 0dBm to -40dBm 850-1550nm; system dynamic range 40dB
Length accuracy	±3%; maximum distance measurement 3000m
Display resolution	Power/attenuation: 0.1dB, length: 0.1m/0.1ft

## Copper Cable Testing and Certification

# SignalTEK™ Gigabit Ethernet Qualifier & SignalTEK™ FO Multimedia Ethernet Qualifier

SignalTEK™ provides a technically innovative method to test and document performance of voice, data, video and VoIP applications for cabling installers and network technicians. It tests the link's ability to support applications by transmitting Ethernet packets on the wire and measuring the link performance according to IEEE 802.3ab Gigabit

Ethernet standard. By monitoring transmitted and received data packets, it can report the BERT (Bit Error Rate Test) for the link.

**SignalTEK™ FO** is the first active ethernet certifier that offers both copper and fibre optic testing; and **SignalTEK™** does it for less than the price of an Optical Test Set alone.

Multi-colour LEDs indicate link status, loopback mode, 10/100 and Gigabit device detection, Autotest pass/fail, and battery condition

Autotest key to initiate tests from the remote end for one person operation

Port status function detects 10/100 or Gigabit Ethernet devices



Compact design and soft overmould sides fit well into any sized hand

Displays result for last autotest via red or green LED indication

Single button push for active network testing and monitoring

Single button cable testing



2.89 (7.1cm) 1/4 VGA Colour Display with backlighting for use in low light condition

Context sensitive softkeys

Quick navigation key returns to Job Manager screen

Easy-to-navigate user interface

## Features and Benefits

- Simulate real world network traffic with full-duplex gigabit performance testing
- User selectable 10/100/1000 Bit Error Rate Testing (BERT) to ensure performance for all Ethernet devices. Decibel (dB) loss measurements of optical lines.
- Smart autotest function detects line condition and automatically chooses appropriate test to run to allow testing cable that is terminated with a SignalTEK remote, a network device or unterminated
- Save time using the remote to perform 10/100 or gigabit service detection AND initiate an Autotest when main unit is connected
- Maximum flexibility with two USB ports. Connect to a computer to

- upload test results, connect directly to a printer, or connect a USB memory drive for unlimited storage
- Configure multiple target IP addresses for pinging several network devices to ensure communications with servers, printers, IP cameras, home automation controls, etc.
- Offers network interrogation tools such as link establishment, port LED blink and ping
- TDR to accurately measure length and locate shorts and opens
- ARP test discovers active network devices
- Exceeds 100m measurement distance required by IEE 802.3ab Gigabit Ethernet
- Dual Wavelength Capability – available in both 850nm and 1300nm wavelengths to support virtually all LAN and campus fibre applications.

## SignalTEK™ FO

### Multimedia Qualification Tester Kit

- SignalTEK™ FO Multimedia Qualification Tester Kit
- 1 SignalTEK™ fibre ready near-end and 1 remote-end handset
- Carrying case
- Copper cable accessory kit with interfaces to RJ-45, RJ-11, Coax F-Type cables, and alligator clips
- Fibre optic cable accessory kit: 2 duplex LC-SC 50/125µm (2m/7ft) cables, 2 duplex LC-SC 62.5/125µm (2m/7ft) cables, 1 duplex SC-SC adaptor.
- 8 AA alkaline batteries
- 2 AC power adaptors with international plugs
- USB interface cable
- 1 CD-ROM User Manual
- 1 Training DVD



Interchangeable Small Form-Factor Pluggable port with duplex LC connector for fibre-optic testing

Fibre activity LED's. Red LED lights when transmitter is active. Green LED lights when signal is detected.

RJ-45 port for copper testing



## SignalTEK™ Standard Kit

Catalog No. 33-975

- 1x SignalTEK™ Display and Remote
- 1x Black Nylon carrying case
- 2x 12 inch (30.5cm) RJ-11 silver satin cables
- 2x 24 inch (61cm) RJ-45-to-F patchcords
- 2x 12 inch (30.5cm) RJ-45 shielded patchcords
- 2x 12 inch (30.5cm) RJ-45-twin crocodile clip cords
- 8x AA alkaline batteries
- 1x USB cable
- 1x Quickstart guide
- 1x CD-ROM User Manual



Description	Cat. No.
SignalTEK™-FO w/850 Modules	33-984
SignalTEK™-FO w/13X0 Modules	33-985
SignalTEK™-FO w/850 & 13X0 Modules	33-986
SignalTEK™-FO w/o Modules (Fibre-Ready)	33-988
SignalTEK™ Kit - Copper Only	33-975
Universal 120-240V Power Adaptor	4010-00-0136
RJ-45 to 8 Head Crocodile Clip	K-7920
Pair of 850nm SFP Modules	SFP-850
Pair of 13X0nm SFP Modules	SFP-13X0
Pair of 1550nm SFP Modules	SFP-1550

Ordering Information

SignalTEK™ and SignalTEK™-FO	
Physical Dimensions	Display Handset: 7.9"L × 3.62"W × 1.5"D (20.1cm × 9.1cm × 3.8cm), Remote Handset: 6.8"L × 3.5"W × 1.5"D (17.3cm × 8.9cm × 3.8cm), Display: 12.5 oz. (354g) Weight without batteries, Remote: 9 oz. (255g) Weight without batteries
Cable Types	Voice/phone cable –USOC/RJ-11/RJ-12 interface, Data cable – (STP/UTP)RJ-45 for CAT 3/5e/6/6A/7cabling; Coax cable – via RJ-45-to-F - patch cord, series 58, 59, 6 cabling (75 ohm)
Cable Length Measurement	Exceeds IEEE 802.3 specifications
Battery Life: Standard AA Alkaline Batteries	Cable testing: Up to 8 hours for the copper version and up to 5 hours for the fibre version
Ports/Connections	RJ-45 test interface port; Mini-USB "A" device port; Standard USB "B" host port; DC power input for longterm network monitoring; Fibre Testing: Recommend use of AC adaptors when testing fibre
Tests Available	Standard, VoIP, IP Video and Web BERT selections; Link Speed (10/100/1000 Mbps); Link Status - Full/Half Duplex, straight/cross-over; Length Measurement (copper only); Bit Error Rate Test (BERT) - per IEEE 802.3ab standard with default and user selectable rates; Decibel Loss (fibre only); DHCP Service Test (fibre & copper); Ping Test with IP and URL Entry (copper & fibre) ARP Device Discovery (copper & fibre)
Ports/Connection	USB A/B, DC power input – Shielded RJ-45 Port :Supports 10/100/1000Mbps Ethernet connections; Small Form-factor Pluggable (SFP): Supports SFP modules sourced through IDEAL INDUSTRIES in 850nm and 1300nm, wavelengths, 1000Mbps Ethernet;
SFP-850 – 850nm Module	Class 1 Laser EN60825-1; Compatible fibre types: 50/125µm or 62.5/125µm graded index multimode fibre; Power Output (dBm): -9.5min, -3max; Receiver Power Range (dBm): 0 to -20; Max Link Length: 550m (1800ft) on 50/125µmfibre; 300m (985ft) on 62.5/125µm fibre; Operating Temperature: -10 to 85°C (14 to 185°F), 85%RH non condensing;
SFP-13X0 – 1300nm Module	Class 1 Laser EN60825-1; Compatible fibre types: 50/125µm or 62.5/125µm graded index multimode fibre and 9/125mm step index single mode fibre; Power Output (dBm): -9min, -2.5max; Receiver Power Range (dBm): 0 to -22; Max Link Length: 550m (1800ft) on 50/125µm fibre; 300m (985ft) on 62.5/125µm fibre; 10km (6.2mi) on 9/125µm fibre; Operating Temperature: -10 to 85°C (14 to 185°F), 85%RH non-condensing;
Length Measurement	RJ-45 Port: TDR length measurement of 1-4 pair cables to 140m/460ft; SFP Port: No length measurement of fibre optic cables;
Bit Error Rate Measurement	Copper: 10/100/1000Mbps. Error rates tested to IEEE 802.3ab standard; Fibre: 1000Mbps. Error rates tested to IEEE 802.3ab standard;
Battery Life: Standard AA Alkaline Batterie	Copper Testing: Approx 15 hours @ 22 tests per hour (45s Autotest); Fibre Testing: Recommend use of AC adaptors when testing fibre;

Specifications

## Cable Installation Test & Certification

### VDV PRO Copper Cable Verifier

The VDV PRO Cable Tester is an easy-to-use cable testing and verification device that can quickly test all wiring requirements found throughout today's residential and commercial environments.

- **Voice** – tests 3-pair USOC and 6-position RJ-11/12 jacks for voice cable testing
- **Data** – tests wire map of shielded and unshielded cable to T568A/B standard
- **Video** – tests coax cable for opens, shorts and length with F-Connector interface



### Features and Benefits

- Larger backlit LCD screen for better test results readability
- Selectable backlight
- Network link LED blink for visual cable tracing
- Voice testing capability detects RJ-11 (1, 2, or 3 pair)
- Voice test also shows Normal or Reverse for pins 1 through 6
- Length measurement is shown during initial test results for convenience and time savings
- Eight remotes have RJ-45, RJ-11 and Coax F-jacks for increased testing capabilities
- Tests for shield continuity, shorts, opens, miswires, reversals and split pairs with remote connected
- Full dot-matrix LCD display for user convenience to read display results
- One-ended testing for shorts, opens and split pairs (no remote needed)
- Test results displayed in wire map format with message line for shorts and split pairs
- Displays PASS and sounds beep (selectable) for T568A/B
- Will display wiremap for 10Base-T and Token Ring with remote connected
- UTP, STP, and Coax length measurement in feet or metres using cable capacitance method
- Coax mapping with up to eight colour coded coax remotes
- Tone generator mode sends four different tones on all conductors, selected pair or selected pin
- Auto-off in any mode and low power consumption for long battery life
- Low battery symbol indicates when to change battery
- 9V battery included and easy to change in the future as needed
- Identifies presence of voltage on cables



Interchangeable Small Form-Factor Pluggable port with duplex LC connector for fibre optic testing

Compact ergonomic design puts full-featured VDV functionality in the palm of your hand

Simple four button operation

Dockable remote with RJ-11/12, RJ-45, and Coax (F-Connector) interfaces. Remote #1 stores securely in the base of the main unit for ready availability and easy patch cable testing

Remote ID number on display. UTP indicated as "No Shield" and STP as "Shield."

Large backlit LCD displays current test mode, test results and all faults for the various cable types. Display automatically warns of voltage on lines and shows a "PASS" or "Miswire" message after each test.

Description	Cat. No.
VDV PRO w/one remote and terminator	33-770
VDV PRO w/eight remotes and terminators	33-771
VDV PRO Eight Remote Kit (ID 1-8)	33-774
Eight Coax Terminator Kit	33-775
VDV PRO w/one remote and amplifier probe	33-780



## IENet™ PRO Industrial Ethernet Tester

The tester features a unique easy-to-use cable test for 2 pair and 4 pair Industrial Ethernet cabling. With shielded 2 pair, M12 and RJ-45 ports, the IENet™ PRO is compatible with most Industrial Ethernet cabling. Test results are displayed in the PROFINET® Industrial Ethernet required format.

### Features and Benefits

**The IENet™ PRO tester makes it a snap to quickly verify wiring integrity and assure proper terminations for diverse types of industrial cabling.**

- Simple selection between Voice, 2 and 4 pair Data, and Coax testing functions (Voice and Video/Security tests via optional adaptors)
- Tests for opens, shorts, miswires, reversals, split pair (user selectable) and length
- Indicates correct wiremap to T568A/B standards for shielded and unshielded cabling
- Easy-to-read LCD display with "PASS" or "Miswire" indicator for each test
- Identifies presence of voltages on cables
- Tone generator supports four different tones making fault isolation easier
- Integrated remote unit to make storage and carrying easier
- Can support additional optional remotes making it efficient for one person testing
- Network LED blink for visual cable tracing
- Numerical indication for UTP "No Shield" and STP - "Shield" to comply with industrial ethernet PROFINET® requirements

Integrated RJ-45 (UTP/STP) and shielded M12 interfaces on top of the unit

Large backlit LCD displays user current test mode, test results and all faults for the various cable types. Display automatically warns of voltage on lines and shows a Pass or Miswire message after each test.

Remote ID number indicated on display, UTP indicated as "No Shield" and STP as "Shield"

Compact ergonomic design puts full-featured Industrial Ethernet cable testing in the palm of your hand.

A single button push immediately selects between VOICE, 2 and 4 pair DATA or VIDEO testing functions.

Detachable remote with RJ-45 and shielded M12 Coax interfaces.



PROFINET® is a registered trademark of PROFIBUS International.



### Ordering information

Description	Cat. No.
IENet™ PRO w/single remote	33-772
IENet™ PRO w/eight remotes	33-773
Eight Coax Terminator Kit	33-775
IENet™ PRO Eight Remote Kit (ID 1-8)	33-776
RJ-45 to RJ-11 jack adaptor (2/card)	LA-4233
RJ-45 to F-Connector adaptor (2/card)	LA-4234
F to BNC Adaptor Kit	LA-4173

## Copper Cable Testing and Certification

# SecuriTEST™ PRO CCTV/Security Tester

SecuriTEST™ PRO is the most versatile all-in-one installation and troubleshooting tool for the CCTV professional. CCTV installers often need to carry a variety of testing tools to complete their work. SecuriTEST™ PRO combines the most-needed tools in one easy-to-carry package. Since all connections (video/communications/DMM) attach to a single unit, SecuriTEST™ PRO eliminates the need to juggle several devices while on a ladder or lift, making working conditions safer and increasing productivity.

### Features and Benefits

- IRE video level and sync tests
- Sound level test through integrated speaker and on screen level indicator
- High capacity lithium-ion battery
- Support for additional PTZ protocols
- Carrying case included
- Seven Essential CCTV Tools - Combines a CCTV video tester, PTZ camera controller, Digital Multimeter, UTP cable tester, video test pattern generator, PTZ protocol analyser and camera programmer in a single compact package.
- Save Time & Money - Test, aim, focus and program cameras when working alone. Save time by not having to walk back to the control centre to verify functionality of each camera.
- Compact Design - Combines all the most needed security tools in a lightweight easy-to-carry unit. Sharp, bright 2.5 in. (6.3 cm) colour LCD screen with on-screen displays for PTZ control/diagnostics and DMM readouts.
- PTZ Protocol Analyser - Compatible with 20+ PTZ protocols to test and program cameras in the field. Decodes and identifies output from PTZ console to aid in troubleshooting.



### Ordering information

Description	Cat. No.
SecuriTEST™ PRO CCTV/Security Tester only	33-892



### **VDV MM - Multimedia Cable Tester**

Easy-to-use tester for installers working with voice, data and video applications. One tester for all applications!

- Tests for opens, shorts, miswires, reversals and split pairs. Also indicates correct wire map. Has automatic shut off (to prolong battery life) and low battery indicator.
- Easy-to-read LCD display with "PASS or ERROR" indicator after each test
- Tone generator supports four different tones making fault isolation easier
- One remote wire map and testing unit is stored inside tester — easier to keep all parts together
- Uniquely designed remote accommodates RJ-11, RJ-45 and F-style connectors

- **Voice** — supports 3-pair USOC and 6-position RJ-11/12 jacks for telephone cable testing
- **Data** — supports both shielded and unshielded cable testing to T568A/B (RJ-45)
- **Video** — tests coax cable for opens and shorts with F-connector interface



Description	Cat. No.
Kit with integrated remote and accessories	33-856

### **Test-Tone-Trace Kit**

- Kit includes the VDV (33-856) and Amplifier Probe (62-164)
- Tests and traces coax, twisted pair and telephone cables



Description	Cat. No.
Test-Tone-Trace Kit	33-859

### **LinkMASTER™ Tester**

Tests wiring configurations on UTP/STP cables. Checks for shorts, miswires, reversals and split pairs. Debug feature, automatic shut-off and low battery LED indication.



Description	Cat. No.
LinkMASTER™ Tester and Remote	62-200

### **540DK Tone Generator & Amplifier Probe**

- Tracing and continuity checking of telecom and datacom cables
- Ergonomic design aids grip and durability
- Probe's unique rubber tip won't break or crack
- LED lamp provides visual indication of correct wire
- External terminals for butt-set connection
- Volume adjustment knob
- Batteries included



Description	Cat. No.
Tone Generator & Amplifier Probe	540DK



## Cable Installation Test & Certification

### PRO Amplifier Probe and Tone Generator

#### Tone Generator

- Emits three different types of tones
- Auto-off after three hours of non-use
- F-Connector port for toning & tracing coaxial CATV cabling systems
- Tone can be added in any status

#### Amplifier Probe

- Identifies and traces wire or cables within a group
- Battery low indicator

Description	Cat. No.
Amplifier Probe & Tone Generator Kit - includes: 62-164, 62-160, Lead Set, Cable Assembly	33-864
Amplifier Probe	62-164
Tone Generator	62-160



### TRACETone™ Tone Generator & Amplifier Probe

- Test continuity and locate signal of installed wire and cable
- Two selectable tone styles
- Tone Generator & Amplifier Probe fit together for easy storage
- Adjustable volume control
- RJ-11 Alligator Clip, RJ-11 Cable Assembly included

Description	Cat. No.
TRACETone™ Tester	62-140



## Installation Tools, Connectors and Accessories



See page 47 for the full range of IDEAL INDUSTRIES NETWORKS installation tools, connectors and accessories



## ***FIBRE OPTIC INSTALLATION, TEST AND TROUBLESHOOTING***



Fibre optics has revolutionised the bandwidth carrying capability of modern networks and therefore the services which would otherwise be impossible to provide. However, this capability is only as good as the quality of installation. Installation is extremely sensitive and requires significant attention to fibre preparation, quality of connection and cleanliness to ensure maximum transmission of data.

IDEAL INDUSTRIES NETWORKS provides an excellent range of products for all LAN and WAN fibre installers to ensure quality fibre preparation, testing and fault finding. The range of tools for preparation includes strippers for outer jackets, serrated cutters, polishers & cleaning kits for

end preparation ensuring the highest quality connection and minimum loss of attenuation. The test range includes microscopes for connector inspection, visual fault finders and a power meter light source for troubleshooting and attenuation measurement. The OTDR range, suitable for WAN and LAN, offers high accuracy results, reliable fault location and excellent distinction between 'real' events and noise.

IDEAL INDUSTRIES NETWORKS fibre optic range is a comprehensive installation kit and a must for all fibre installers ensuring high quality installation with quick and easy test and troubleshooting solutions.

## **Fibre Optic Installation, Test and Troubleshooting Range**



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Page 26

	<b>OTDR</b>	<b>FiberTEK FDX</b>	<b>FiberMASTER</b>	<b>Visual Fault Finder</b>	<b>Fibre inspection microscope</b>
<b>Certification to international standards</b>	✓	✓			
<b>Fault location</b>	✓			Visual	Visual
<b>Pass/Fail test results</b>	✓	✓			
<b>Fibre modes</b>	MM/SM	MM/SM	MM/SM	MM/SM	MM/SM
<b>Bidirectional testing</b>	via PC	Automatic			
<b>Light source type</b>	Laser	LED/Laser	LED/Laser	LED/Laser	
<b>Tier 1 tests</b>	✓	✓	✓		
<b>Tier 2 tests</b>	✓				
<b>Documented test results</b>	✓	✓			
<b>Optical Power measurement</b>		✓	✓		
<b>Connector inspection</b>	✓				✓



## **Quad OTDR 33-960 Series**

Designed with installers in mind, 33-960 Series Micro OTDR offers excellent performance and ease of use in a truly handheld, lightweight and rugged package. Available as 850/1300/1310/1550 nm (multimode and single mode) OTDR is ideally suited for the installation and troubleshooting of LAN, campus and WAN fibre networks. The models combine high measurement precision with the user friendliness of one-button operation resulting in accurate characterisation of connectors and splices in addition to fast and reliable fault location.

With the 33-962-5 option, this OTDR provides clear PASS/FAIL indication. Distance, loss and ORL for each event is reported in a trace summary table making full certification of the link possible. Each OTDR is shipped in a kit containing everything you need to get started on the job, including a ruggedised carry case, PC software, rechargeable batteries and wall charger

### **Target Applications:**

- Tier-2 certification of premise and enterprise networks that require OTDR testing. The feature set of 33-960 Series Micro OTDRs is perfectly matched to this application.
- Increasing bandwidths in LAN and campus fibre cabling demands more in-depth testing.
- The 33-960 Series delivers all necessary test functions in an extremely user-friendly instrument.
- Troubleshooting of fibre links requires an accurate, easy to use OTDR. The high specification and small form factor of the 33-960 series makes them perfect for troubleshooting installations.
- WAN and FTTH cabling requires an OTDR with a high dynamic range. Offering a dynamic range up to 29 dB, the 33-960 Series is more than capable of the job.



## Fibre Optic Installation, Test and Troubleshooting

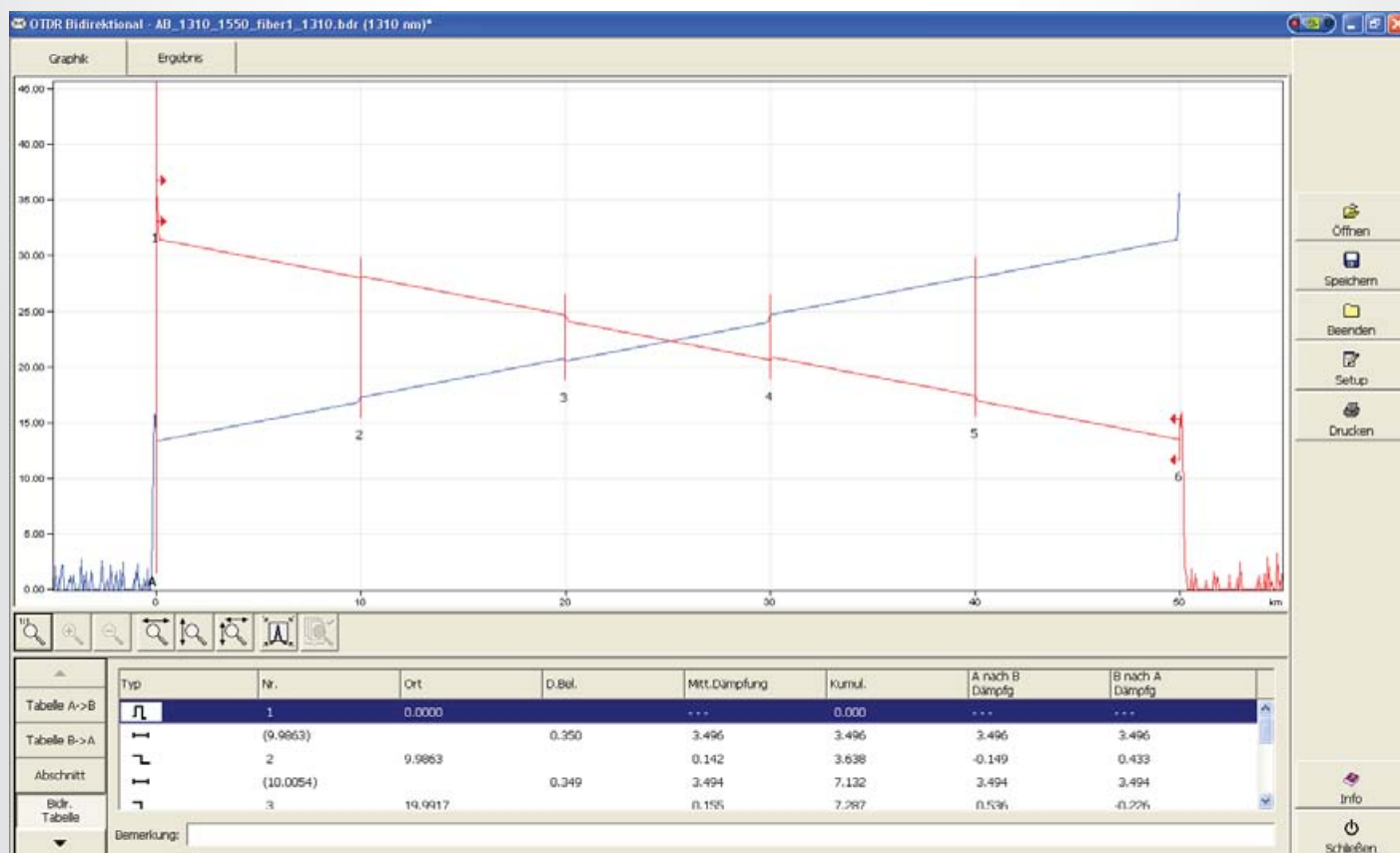
### Features and Benefits:

- Short attenuation and event dead zones for accurate location and characterisation of events. Suitable for even the shortest fibre links.
- Two wavelength “autotest” function with automatic adjustment of test parameters
- Manual mode allows users to define all test parameters
- Real-time mode for troubleshooting. Useful when trying to identify intermittent problems.
- Clear characterisation of events
- Fast data acquisition
- Interchangeable fibre adaptors with a wide variety of available configurations
- PC Software included. Reports in Bellcore™ format
- Colour display
- USB connection to thumbdrives or PCs.
- Optional Certifying OTDR firmware
- Optional macro bend detection on single mode fibres
- Video inspection probe ready



### Comprehensive PC Software

- Multilingual PC software is included as standard in all kits. This software is used to manage OTDR traces and test data. Downloads from the OTDR can be made to a memory stick or directly through the USB interface to a PC.
- An AUTO mode makes interpretation of traces straightforward. The EXPERT mode allows more experienced users to evaluate test data using up to 4 markers for attenuation in dB and dB/km, optical return loss and reflection.
- With adjustable PASS/FAIL limits, the software gives a clear indication of the quality of links being tested.
- The PC software allows export in Bellcore™ format, making test results compatible with world wide OTDR standards.
- The kit also includes a viewer for bi-directional tests, allowing the user to overlay A => B / B => A plots.
- Test results can also be printed or stored as PDF file





### 33-962-5 Certifying OTDR and Macro Bend Detector Option

The Certifying OTDR option turns 33-960 Series OTDRs into full certifying instruments with clear PASS/FAIL indication for every link. A single summary screen delivers all key measurement values. Installations that specify "Tier-2" certification will find this option invaluable as it gives instant PASS/FAIL results for every link without having to resort to cumbersome manual evaluation of traces. It also benefits less experienced users by providing clear decision points on whether a link is good or bad. The Macro Bend Detector finds areas along the fibre where minimum bending radii are undercut. Especially at splicing cassettes or patch panels, macro bends can cause excessive attenuation. Without this option macro bends are extremely hard to detect or are often confused with splices.

*Please note that this option cannot be installed in the field.*

*It is a factory installed option only, so wherever possible should be ordered at the same time as the main OTDR.*

OTDR - Unnamed OTDR

**Summary**

Wavelength	Status	Span Loss	Span ORL
1310 nm	PASS	2.27 dB	<18.47 dB
1550 nm	PASS	1.65 dB	<17.76 dB

Span Length: 1.958 km

No macrobend detected.

Save...
Trace...

## 33-960-2 Video Inspection Probe

Poor cleanliness is the number one reason for failures in fibre optic networks. The optional video probe helps users document and troubleshoot fibre optic installations by providing visual inspection of connectors. Unlike optical microscopes, video microscopes offer 100% eyesight protection plus the ability to store connector images on the OTDR for later download and documentation.

Magnifications of 200x and 400x deliver crystal clear images of connectors. In addition, a wide range of probe tips makes the video probe a useful diagnostic tool in many different applications.

The 33-960-2 Video Inspection Probe is compatible with all 33-960 Series OTDRs which incorporate a video probe port as standard - no upgrade is required to drive the probe.



### Ordering information

Quad OTDR Kit	Cat. No.
Quad OTDR with 850/1300/1310/1550nm	33-960-3
Ruggedised carrying case	
PC-Software	
CD with manual and Quick Reference Guide	
Wall charger	
2x Li-Ion rechargeable batteries	
1x SC and 1 FC Adaptor	

Testing	
Wavelength [nm]	850, 1300, 1310, 1550
Dynamic Range [dB]	24 / 25 / 29 / 28
Attenuation dead zone [m]	11 / 11 / 11 / 12
Pulse width [ns]	10, 30, 100, 275, 1000, 2500, 10000
Event dead zone [m]	2.5 worst case
Launch Conditions (MM)	Class CPR 1 or 2
Linearity [dB / dB]	± 0.03
Loss threshold [dB]	0.05
Loss resolution [dB]	0.01
Sampling resolution [m]	0.16 to 5
Sampling points	Up to 30000
Typical real time refresh [1/sec]	4
Distance uncertainty [m]	± (0.75 + 0.0025% x distance + sampling resolution)
Distance range [km]	MM: 0.1 to 40 SM: 0.65 to 160
Stable source output power [dBm]	MM: -1.5 SM -6.5
Laser Safety	21 CFR 1040.10 and IEC 60825-1:1993+A2:2001 / Class 1M
Hardware	
Memory capacity	500 traces
Data connectivity	USB A and USB B
Size (HxWxD) [mm]	250 x 125 x 75
Weight	1 kg
Temperature	Operating: -18°C to 50°C, Storage: -40°C to 70°C
Batteries	2 x Li-Ion
Power supply (mains)	110 – 230 V AC
Power supply (unit)	9 - 24 V DC, 12 Watt
Operating time	8 hours (per Bellcore™ TR-NWT-001138)
Warranty	1 year

### Ordering information

Accessories	Cat. No.
200x and 400x video probe w. USB port	33-960-2
Certifying OTDR and Macrobend firmware (note: has to be ordered in advance or tester must be returned to IDEAL service department)	33-962-5
Visual Fault Locator, red light laser source, 5 km reach	VFF5
Cleaning Kit	1219-00-1621
Rechargeable battery	4010-00-0001
Foldable USB Keyboard	33-960-4
Adaptor for FC connectors	33-961-1
Adaptor for SC connectors	33-961-2
Adaptor for ST connectors	33-961-3
Adaptor for E2000 connectors	33-961-4
Adaptor for DIN 47256 connectors	33-961-5
Adaptor for HMS-10/AG connectors	33-961-6



## FiberMASTER™ Fibre Optic Test Kit

Measure fibre optic power in milliwatts (mW) and decibel-milliwatts (dBm) to test and troubleshoot active LANs. Quickly measure cabling loss with the automatic calibration feature that stores reference power from any light source for quick dB loss calculations. Plus, the 1490nm wavelength measurement mode is perfect for troubleshooting emerging Fibre-To-The-Home cabling systems.

### Features and Benefits:

- Fibre Optic Power Meter & Light Source — Four wavelength power meter for multimode and single mode testing, and 850nm multimode LED light source.
- Calibration Function — Stores reference power level for quick dB loss measurements eliminating the need to manually calculate loss.
- Save Time and Money — Power meter features 2.5mm universal and FC adaptors, light source includes ST, SC and FC adaptors to test the most common interfaces.
- Ready for FTTx — 1490nm measurement wavelength for use with nearly all single mode Fibre-To-The Home applications.
- Designed for the Field — Unique “docking” light source and easy three-button operation make this the perfect fibre tester for use in the field.

### FiberMASTER™ Kit Includes

- 33-926 Light source, 850nm LED with ST, SC and FC adaptors (Basic Kit)
- 33-929 Light source, 850+1300nm, LED, 1310+1550nm, Laser Light source with ST, SC and FC adaptors (Quad Kit)
- 33-927 Power Meter, 4 wavelength with universal 2.5mm and fixed FC adaptor
- 2x FC-SC 50 (1x SC-SC, 9µm single mode cable for Quad Kit) multimode cables
- 1 SC calibration coupler
- Carrying case
- English, Spanish, German, French, Portuguese, Italian and Chinese user manual

Description	Cat. No.
850nm Fibre light source	33-926
Power Meter only	33-927
FiberBasic Fibre Optic Test Kit	33-928
Four wavelength MM/SM light source only	33-929
FiberMASTER™ Quad Optic Test Kit	33-931

Ordering Information

Power Meter	
Wavelength	850, 1300/1310, 1490, 1550nm
Detector	InGaAs -60 to +3dBm
Accuracy	±5%
Display Resolution	.01
Connector	Universal 2.5mm w/FC adaptor
Power Supply	AAA Alkaline Battery x 3
Operating Time	360 hours
Operating Temp	-10 to +60°C
Storage Temp	-25 to +70°C
Light Source	
Wavelength	850, 1300, 1310, 1550nm laser diode
Output Power	-6 to -7 dBm Typical
Stability	.05dB after 15min, 0.1dB over 8 hrs
Connector	2.5mm w/ST®, SC, FC adaptors
Power Supply	AAA Alkaline Battery x 3
Operating Time	40 hours
Operating Temp	-10 to +60°C
Storage Temp	-25 to +70°C

Specifications





# Fibre Optic Installation, Test and Troubleshooting



## Optical Multimeter

### Simple and Reliable Optical Loss Test Set

The Optical Multimeter combines the functions of a Laser Source and a Power Meter into a single simple-to-use instrument used to test fibre optic cables and equipment. The power meter is calibrated at a large number of wavelengths to enable power measurements to be made on a wide range of Single Mode and Multimode fibre optic cable systems.

Description	Cat.No.
Optical Multimeter combining the functions of a 1310/1550 nm Laser Source with a Power Meter. Includes Euro mains adaptor/charger, rechargeable battery, SC/FC/ST connectors, RS232 cable, PC support software, user guide and carry case.	R02X0000

Transmitter	
Wavelengths	1310, 1550 nm
Output power	-7 dBm (typical)
Spectral width	< 10 nm
Output Stability	± 0.1 dB (long term, including warm-up time)
Warm-up time	10 min
Receiver	
Wavelength range	800 nm to 1700 nm
Measurement range	+6 to -70 dB
Uncertainty	5%
General	
Dimensions	210 mm x 115 mm x 55 mm
Weight	540 g
Operating time	up to 28 hours

Specifications



## Optical Power Meter

### For Quick and Easy Output Power Measurements

IDEAL'S Optical Power Meter features a robust design, wide range of power measurement, high accuracy and long battery life. It is calibrated at a large number of wavelengths to enable power measurements to be made on a wide range of Single Mode and Multimode fibre optic cable systems.

Description	Cat.No.
Optical Power Meter 850 to 1550 nm. Includes batteries, SC/FC/ST connectors, user guide and carry case.	R01X0000

Basic Features	
Wavelength range	800 to 1700 nm
Wavelength	calibration points: 850, 980, 1300, 1310, 1490, 1550 nm
Measurement range	+3 to -70 dBm
Resolution	0.01 dB
General	
Dimensions	175 mm x 82 mm x 33 mm
Weight	325 g
Operating time	up to 45 hours

Specifications



## Optical Light Source

### The Ideal Partner for Optical Equipment Installation and Troubleshooting

The Optical Light Sources are simple to use transmitters that can be used in conjunction with other types of test equipment, such as power meters and fibre identifiers, to test fibre optic cables. There are three types in the range to cater for up to four different wavelengths, on Single Mode and Multimode fibre.

Description	Cat.No.
Optical Laser Source with 850 and 1300nm wavelengths primarily for testing Multimode fibres. Includes battery, SC/ST/FC optical connectors, user guide and carry case.	R06M0000
Optical Laser Source with 850, 1300, 1310 and 1550nm wavelengths for testing Multimode and Single mode fibres. Includes battery, SC/ST/FC optical connectors, user guide and carry case.	R06MS000
Optical Laser Source with 1310 and 1550nm wavelengths primarily for testing Single mode fibres. Includes battery, SC/ST/FC optical connectors, user guide and carry case.	R06S0000

Basic Features	
Wavelengths	850/1300, 1310/1550/1300/1310/1550 nm
Output power	-7 dBm (typical)
Spectral width	< 10 nm
Output Stability	± 0.1 dB (long term, including warm-up time)
Warm-up time	10 min
General	
Dimensions	175 mm x 82 mm x 33 mm
Weight	325 g
Operating time	up to 45 hours

Specifications



## Visual Fault Finder

Laser light source used to locate breaks, faulty splices and crimps

- 2.5mm Universal Adaptor for all ST, SC and FC connectors
- Useful over a distance of 5km (3 miles)
- Two AA batteries provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged solid aluminum body
- Nylon carrying case with belt loop included



Description	Cat. No.
Visual Fault Finder	VFF5

## Fibre Inspection Microscope

- 100X magnification for viewing multimode connectors
- Includes 2.5mm connector "Universal Adaptor" for FC, ST and SC style connectors
- Oblique illumination provides excellent view of ferrule cleanliness and core condition
- Rugged, rubberised metal housing, precision glass optics and a built-in laser safety filter
- White LED illumination delivers 100,000 hours bulb life
- Optional 200X Conversion Eyepiece threads on for viewing finish/polish of single mode connectors



Description	Cat. No.
Fibre Inspection Microscope w/carrying case	45-332
1.25mm Connector Adaptor	45-334
MTRJ-Style Connector Adaptor	45-335
200X Conversion Eyepiece for Single mode Connectors	45-336

## Optical Fibre Identifier

Non Intrusive Traffic Detector for Optical Fibre

The Fibre Identifier is an essential installation and maintenance tool used to identify power and traffic direction in jacketed or bare fibre without service interruption. The clamp design allows the tester to detect light in the fibre without damage or disconnection and with low bending loss. By inserting the fibre into the adaptor head and closing the jaws of the identifier around the fibre, the optical power inside the fibre can be detected.



Description	Cat.No.
Optical Fibre Identifier. Includes battery, adaptors for 3mm, 2mm, 0.9mm and 0.25mm fibres, user guide and carry case.	RO4X0000

## FIBRE TOOLS AND ACCESSORIES



See page 47 for the full range of IDEAL INDUSTRIES NETWORKS Fibre tools and accessories

# I.T. Network Test & Analysis

## **LanXPLOER PRO - In-Line Network Tester** ..... 30-33

Unsurpassed test capability for Local Area Network management with state-of-the-art touchscreen interface and large clear colour display.





# ***I.T. Network Test & Analysis***



Today's enterprise networks are a dynamic environment with ever increasing demands and changes. With multiple users, more services, security issues, expanding infrastructure and new technologies, monitoring the network through various media poses real challenges to the I.T. administrator, frontline technician or integrator. Networks are also expanding into new environments such as industrial ethernet. The opportunities for problems are becoming increasingly frequent in a world where businesses are becoming more reliant on their performance.

IDEAL INDUSTRIES NETWORKS range of hand held test devices offer a comprehensive range of active and passive network test capability from basic cabling faults through to network monitoring, PC diagnostics and VoIP QoS amongst many others. This range delivers high performance test and troubleshooting capability in LAN, WLAN and VLAN networks over copper, fibre and WiFi. With easy to use menu navigation and complete portability, problems are identified and located fast and effectively ensuring minimum downtime and saving money.

## **I.T. Network Test & Analysis Range**



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	<b>LanXPLORER</b>	<b>SignalTEK</b>	<b>VDV PRO</b>	<b>IENet™ PRO</b>
<b>Continuity and length measurement</b>	✓	✓	✓	✓
<b>Distance to fault</b>	✓	✓	✓	✓
<b>Ethernet speed</b>	✓	✓		
<b>Cable qualification</b>		✓		
<b>Fibre option</b>	✓	✓		
<b>PoE/PoE+ tests</b>	✓			
<b>Network discovery and verification</b>	✓			
<b>Ethernet packet and data error statistics, Top 10</b>	✓			
<b>VoIP Tests</b>	✓			
<b>EDP, CDP, LLDP, VLAN and 802.1.X support</b>	✓			
<b>Industrial mode</b>	✓	✓		✓



## **LanXPLOER PRO**

### *In-Line Network Tester*



LanXPLOER PRO is an outstanding In-Line Active and Passive network tester from IDEAL INDUSTRIES NETWORKS. It offers unsurpassed test capability for Local Area Network management with state-of-the-art touchscreen interface and large clear colour display.

LanXPLOER PRO is a high quality, powerful, convenient and easy to use tester unrivalled by any other product available today.

With full In-Line and Endpoint test capabilities, LanXPLOER PRO tests not only copper cables but also active LAN connections over copper and fibre links. In addition, it liberates the user from cables by allowing most tests to be conducted through a wireless connection offering unparalleled flexibility. With such comprehensive test capability and ease of use, LanXPLOER PRO is the perfect tool to meet the needs of professional IT installers and systems administrators in any enterprise, campus or industrial Ethernet environment.

### *Features and benefits*

#### **Comprehensive Testing Capability**

The LanXPLOER PRO is the most comprehensive network tester on the market with extensive test capability in Copper and Fibre.

#### **Network Tests over Copper & Fibre**

- Identification of active devices with Network Discovery function
- Comparison of active network devices against historical data with Network Verify
- DHCP client, Ping and Traceroute tests with VLAN support
- Full bandwidth Layer 1,2,and 3 Loopback device
- Diagnostic statistics including Top Ten talkers, protocols, error generators and packet size distribution

#### **Copper Features**

- Best-in-class Wiremapper - tests cables by pin as well as by pair with split pair detection and length measurement
- Wire tracing function in combination with an Amplifier Probe
- Detection of PoE and PoE+, with voltage, current and power measurements in endpoint and In-Line modes
- Hub blink test with colour-switching on supported devices
- 10/100/1000 BASE-T support
- Network monitoring with In-Line tests and PC diagnosis function
- Monitoring of VoIP calls and quality, including RTP Jitter

#### **Optical Fibre Features**

- Single mode and Multimode SFP options
- 1000 BASE-SX, LX and ZX support
- Hub blink

#### **WiFi Features**

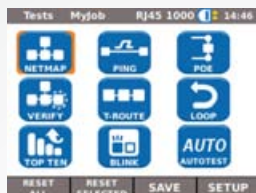
- Identification of active network devices with Network Discovery function
- Comparison of active network devices against historical data with Network Verify
- DHCP client, Ping and Traceroute tests with VLAN support
- 802.11 b,g and n support
- Identification of access points, Service Set Identifiers (SSID), channels in use, signal strength and security settings
- Detection of channel conflicts
- Optional - see back page for details

#### **Two other products exist in the LanXPLOER family:**

- LanXPLOER – Standard model
- LanXPLOER PLUS – Standard model plus WiFi

## LanXPLOER PRO *Simplicity of Use*

The LanXPLOER PRO redefines 'Simplicity of Use'. Through its state of the art QVGA 3 1/2" Colour Touchscreen display, the LanXPLOER PRO replaces the complex menu navigation of existing products with a revolutionary Touch 'n' Test system. Testing with LanXPLOER is simple and fast. Results are easy to interpret through its high resolution graphic display.



Touchscreen menu navigation allows tests to be completed within three steps



Virtual Keyboard allows easier and much faster data inputs



Crystal clear graphical interpretation of results like Wiremap through large 3 1/2" QVGA colour display



### WiFi

WiFi port provides wireless access to LANs for testing

### SFP Fibre Slot

Fibre test capability

### Multifunction Softkeys

For easy menu navigation

### Autotest

Pre-programmable function allows fast and easy testing of common applications Pre-programmable function allows fast and easy testing of common applications

### Cursor Keys

Alternative navigation method according to user preference

### Rubber Moulded Housings

Ergonomically designed rubber housings offering both comfortable feel and robust design

### USB Interface & Internal Memory

Internal memory for up to 100 tests in XML format. Job manager for efficient organization of results. Data exportable to PC via USB flash drive

### QVGA 3 1/2" Colour Touch Screen

Large colour display makes easy interpretation of graphical results plus Touchscreen offers very easy menu navigation

### RJ-45 Connection

For testing copper connections

### Exchangeable RJ-45 Inserts

Allows easy and cheap replacement of RJ-45 sockets

### In-Line Test

Full In-Line Test capability over Copper

### Mains Charger Input

Tester can operate from replaceable dry cells, mains supply or on board rechargeable long runtime battery

Functions	LanXPLOER	LanXPLOER PLUS	LanXPLOER PRO
Advanced Wiremap and Wire Trace	✓	✓	✓
PoE / PoE+ testing	✓	✓	✓
Network Discovery	✓	✓	✓
Network Verify	✓	✓	✓
DHCP, Ping, Traceroute, VLAN	✓	✓	✓
Endpoint LAN Testing over Copper	✓	✓	✓
Port discovery: LLDP, EDP, CD	✓	✓	✓
LAN Testing over WiFi		✓	✓
Loopback Mode			✓
LAN Testing over Optical Fibre			✓
Touchscreen			✓



Description	Cat. No.
<b>LanXPLOER</b>	
1x LanXPLOER Test Unit, 1x Remote Unit #1, 6 x AA Dry Cell Batteries (non-rechargeable), 2x Patch Cables, 30cm, Cat. 5e STP, 1x Manual on CD, 1x Quick Reference Guide, 1x Carrying Case	150002
<b>LanXPLOER – PREMIUM Package</b>	
1x LanXPLOER Test Unit, 1x Remote Unit #1, 1x NiMH Battery Pack, 2x Patch Cables, 30cm, Cat. 5e STP, 1x Power Supply w EU/UK adaptor, 1x IDEAL Amplifier Probe 62-164, 1x Manual on CD, 1x Quick Reference Guide, 1x Carrying Case, 1x RJ-45 Insert Extraction Tool , 10 x Lifejack RJ-45 Inserts	150003
<b>LanXPLOER PLUS</b>	
1x LanXPLOER PLUS Test Unit, 1x Remote Unit #1, Cat. 5e STP, 6x AA Dry Cell Batteries (non-rechargeable), 2x Patch Cables, 30cm, 1x External USB high sensitivity WiFi Antenna 1x Manual on CD, 1x Quick Reference Guide, 1x External USB high sensitivity WiFi Antenna 1x Carrying Case	150004
<b>LanXPLOER PLUS – PREMIUM Package</b>	
1x LanXPLOER PLUS Test Unit, 1x Remote Unit #1, 1x NiMH Battery Pack, 2x Patch Cables, 30cm, Cat. 5e STP, 1x Power Supply w EU/UK adaptor, 1x IDEAL Amplifier Probe 62-164, 1x Manual on CD, 1x Quick Reference Guide, 1x Carrying Case, 1x RJ-45 Insert Extraction Tool , 10 x Lifejack RJ-45 Inserts	150005
<b>LanXPLOER PRO</b>	
1x LanXPLOER PRO Test Unit, 1x Remote Unit #1, 6x AA Dry Cell Batteries (non-rechargeable), 2x Patch Cables, 30cm, Cat. 5e STP, 1x Manual on CD, 1x Quick Reference Guide, 1x External USB high sensitivity WiFi Antenna 1x Carrying Case	150000
<b>LanXPLOER PRO – PREMIUM Package</b>	
1x LanXPLOER PRO Test Unit, 1x Remote Unit #1, 1x NiMH Battery Pack, 2x Patch Cables, 30cm, Cat. 5e STP, 1x Power Supply w EU/UK adaptor, 1x IDEAL Amplifier Probe 62-164, 1x External USB high sensitivity WiFi Antenna 1x Manual on CD, 1x Quick Reference Guide, 1x Carrying Case, 1x RJ-45 Insert Extraction Tool , 10 x Lifejack RJ-45 Inserts	150001





## I.T. Network Test & Analysis



Accessories	Cat. No.
1x Active Remote # 1	150054
Active Remote set #2 to #6	150059
Active Remote set # 2 – 12	150050
1x NiMH Battery Pack	150053
2x Patch Cables, 30cm, Cat. 5e STP	150055
1x Power Supply w EU/UK adaptor	150052
1x Hanging Strap Set	3010-12-0097
1x RJ-45 Insert Extraction Tool, 10 x Lifejack RJ-45 Inserts	150058
1 x External USB high sensitivity WiFi Antenna	150061
1000BASE-SX Fibre Kit. Includes 850nm SFP (Small Form factor Pluggable) SX transceiver, LC/LC and LC/SC duplex multimode cables and SC/SC duplex adaptor	MGKSX1
1000BASE-LX Fibre Kit. Includes 1310nm SFP (Small Form factor Pluggable) LX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor	MGK LX2
1000BASE-ZX Fibre Kit. Includes 1550nm SFP (Small Form factor Pluggable) ZX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor	MGKZX3
1x IDEAL Amplifier Probe	62-164
1x Fibre Tip Pen Cleaner for ST-, SC- and FC- Adaptor	33-963-10
1x Fibre Tip Pen Cleaner for LL/MU - Adaptor	33-963-11
Optical fibre multimode 2m duplex cable with LC-LC connectors	150056
Optical fibre single mode 2m duplex cable with LC-LC connectors	150057



## **Other products for I.T. Network Test & Analysis**

### **SignalTEK™ & SignalTEK™ FO** *Gigabit and Multimedia Ethernet Qualifier*

SignalTEK™ provides a technically innovative method to test and document performance of voice, data, video and VoIP applications for cabling installers and network technicians. It tests the link's ability to support applications by transmitting Ethernet packets on the wire and measuring the link performance according to IEEE 802.3ab Gigabit Ethernet standard. By monitoring transmitted and received data packets, it can report the BERT (Bit Error Rate Test) for the link.

[Full Details on Page 11](#)



### **VDV PRO** *Copper Cable Verifier*

The VDV PRO Cable Tester is an easy-to-use cable testing and verification device that can quickly test all wiring requirements found throughout today's residential and commercial environments.

- **Voice** – tests 3-pair USOC and 6-position RJ-11/12 jacks for voice cable testing
- **Data** – tests wire map of shielded and unshielded cable to T568A/B standard
- **Video** – tests coax cable for opens, shorts and length with F-Connector interface

[Full Details on Page 13](#)



### **IENet™ PRO** *Industrial Ethernet Tester*

The tester features a unique easy-to-use cable test for 2 pair and 4 pair Industrial Ethernet cabling. With shielded 2 pair, M12 and RJ-45 ports, the IENet™ PRO is compatible with most Industrial Ethernet cabling. Test results are displayed in the PROFINET™ PRO Industrial Ethernet required format.

[Full Details on Page 14](#)



# WAN Access

## **MultiPRO** ..... 38

The MultiPRO family of handheld modular tools provides a flexible solution for testing Triple Play, Gigabit Ethernet, xDSL and SDH Copper and Optical-based Telecom systems.

## **UniPRO GbE** ..... 41

Low-cost, high-value tester designed for the roll-out and maintenance of Access, Metro and Carrier Ethernet networks.

## **UniPRO VoIP** ..... 42

Rugged, light and compact tester for wired and wireless VoIP service verification.

## **MC2+** ..... 43

Cost-effective tester for the installation and maintenance of ADSL, ADSL2 and ADSL2+ networks

## **UniPRO Gbis** ..... 44

Our revolutionary tool for testing all types of G.SHDSL service. It combines a state-of-the-art DSL engine with a range of useful copper layer fault checks into a compact, hand-held, battery-powered tester.

## **AuroraPRESTO** ..... 45

Handheld tester used for verification of ADSL, ADSL2, ADSL2+, READSL and SHDSL services.

## **AuroraSONATA** ..... 45

All-purpose ISDN test tool for field technicians



# ***WAN Access Testing***



While Ethernet and IP are now the dominant technologies used within Local Area Networks to deliver information services to end users, transport mechanisms to carry these technologies over Metro and Wide Area Networks are more diverse. IDEAL INDUSTRIES NETWORKS offers a broad range of test equipment for use in these telecom networks.

The telecom user's fundamental needs are the same as in LAN – test equipment which can tell him if his system is working, how well and if not, why. But the diversity of the transport technologies in the telecom access arena creates requirements for testers which can also solve a number of different problems. The Ethernet-based services are often carried over systems such as DSL and SDH, and these systems require special techniques to analyse their performance and diagnose faults. Even where Ethernet is itself the transport technology right across the WAN, new issues arise which can affect the Quality of Service and hence require testing. All services demand a certain bandwidth, and it is important to qualify the WAN transport system to confirm

that the required throughput is reliably available, and to pinpoint any potential bottlenecks. But certain services are also sensitive to other more subtle characteristics of the end-to-end connections that the WAN provides to link remote LANs together. Voice services, for example, are affected by excessive latency, which causes disturbing delays in two-way conversations. And video quality is degraded by jitter which results in picture break-up. Ensuring that the demanded Quality of Service is delivered requires some quite complex tests, but these need to be performed by test equipment that presents the answers in a simple and meaningful way.

All of IDEAL INDUSTRIES NETWORKS' telecom access test products are based on this premise, letting the user know what is happening, from the simplest of physical connection problems right up to complex high-layer performance faults, in a way which gives busy telecom engineers tools optimised for the way they work, so that they can quickly get on with the job of maintaining their networks.

## WAN Access Range



	<b>MultiPRO</b>	<b>UniPRO GbE</b>	<b>UniPRO VoIP</b>	<b>MC2+</b>	<b>UniPRO Gbis</b>	<b>Aurora Presto</b>	<b>Aurora Sonata</b>
<b>ADSL</b>	✓			✓		✓	
<b>VDSL</b>	✓						
<b>G.SHDSL</b>					✓	✓	
<b>GbE</b>	✓	✓	✓				
<b>SDH</b>	✓						
<b>Copper Interface</b>	✓	✓	✓	✓	✓	✓	✓
<b>Fibre Interface</b>	✓	✓					
<b>WiFi Interface</b>			✓				
<b>Triple Play - Data</b>	✓						
<b>Triple Play - VoIP</b>	✓		✓				
<b>Triple Play - Video</b>	✓						
<b>Copper test</b>	✓				✓	✓	
<b>ISDN BRI</b>							✓
<b>ISDN PRI</b>							✓



## MultiPRO

The MultiPRO family of handheld modular tools provides a flexible solution for testing Triple Play, Gigabit Ethernet, xDSL and SDH Copper and Optical-based Telecom systems. Using plug and play interchangeable interface modules (PIMs) fitted to a base platform in seconds, the MultiPRO testers are designed with a wide range of users in mind, for specific or multiple applications, from a quick check to in-depth analysis, in installation, maintenance and troubleshooting situations. With their high definition graphical touchscreen controls, outstanding battery life and rugged design, the MultiPRO testers are always ready to solve the problems of the busy Telecom engineer.



### Features and Benefits

- 5.7" TFT LCD ¼ VGA Touchscreen
- Graphical User Interface
- On-screen context-sensitive help system
- Powerful report generation and wide range of connectivity for exporting
- Dimensions up to 320 x 150 x 120 mm (depending on PIM fitted)
- Weight up to 2.5 kg (depending on PIM fitted)
- Battery life 4 to 6 hours (depending on test conditions and PIM fitted)

### MultiPRO Triple Play

The MultiPRO platform can be used to test Triple Play services over fast Ethernet without the need for any PIM, or over Gigabit Ethernet, xDSL or SDH with the addition of the relevant PIM. It ensures correct end-to-end operation of services delivered over converged networks just as they are experienced by the customer.

### Features and Benefits

- Tests Voice, Video and Data services
- Intuitive Quality of Experience (QoE) tests, including Mean Opinion Score and R-Factor
- Tests at every layer of the protocol stack
- SIP VoIP support, on-screen live Video (MPEG2) and Web Browser

#### Ordering information

Description		Cat. No.
MultiPRO TP/IP	MultiPRO Tester for testing Data, VoIP and Video services via 10/100 Ethernet. Includes compact carry case, PSU, Ethernet crossover and straight cables and user guide.	RMZX0000
MultiPRO TP/IP Plus	MultiPRO Tester for testing Data, VoIP and Video services, including tests for Video MOS and Advanced QoS, via 10/100 Ethernet. Includes compact carry case, PSU, Ethernet crossover and straight cables and user guide.	RMZP0000



## MultiPRO Copper

MultiPRO Copper is a 30MHz tester for qualifying and troubleshooting telephone-grade copper for carrying xDSL services. Its comprehensive set of spectrum-based tests enables an in-depth analysis of every service-affecting parameter to be presented in a form understandable by expert and casual users alike.



### Features and Benefits

- 200Hz to 30MHz qualification
- Graphical results, displayed as plots against frequency
- Results with pass/fail indications and customisable limit masks
- Digital Multimeter and Time Domain Reflectometer built-in
- Full range of transmission tests
- Low-cost Transponder for double-ended tests

Description		Cat. No.
MultiPRO Copper Plus	MultiPRO Tester with Copper PIM for testing up to 30MHz (and Advanced Triple Play via 10/100 Ethernet.) Includes full size case, PSU, 4mm Plug/Clip line cables, Ethernet x-over and straight cables, Active Probe, earth ref cable, C of C and user guide.	RMQ30P00
MultiPRO Copper Suite	MultiPRO Tester with Copper PIM up to 30MHz (+ Advanced TP via E'net.) Includes Transponder with batts, Pair Tracer Probe, full case, PSU, 4mm Plug/Clip cables, E'net x-over and st cables, Active+Passive Probes, earth ref cables, C of C and user guide.	RMQ30S00
MultiPRO Copper	MultiPRO Tester with Copper PIM for testing up to 6MHz (and Triple Play via 10/100 Ethernet.) Includes full size case, PSU, Ethernet x-over and straight cables, Active Probe, 4mm Plug/Clip line cables, earth reference cable, C of C and user guide.	RMQ60000
Copper PIM	Copper PIM for conversion of MultiPRO to MultiPRO Copper. Includes Active Probe, test & earth cables, Certificate of Calibration & user guide. Requires a 405488 earthed PSU if upgrading a pre-2010 MultiPRO equipped with a 2-pin PSU.	RMQUP000
MultiPRO Copper Transponder	Far End Transponder for use with MultiPRO Copper for end-to-end Attenuation, SNR and FEXT tests. Includes carry bag, non-rechargeable batteries, 4mm Plug/Clip line cables and earth reference cable. Can be powered from a MultiPRO or accessory PSU.	405049

Ordering information

## MultiPRO xDSL

A range of PIMs is available to allow MultiPRO to interface to and test xDSL services from the physical layer through to the Triple Play services in the application layer.

### Features and Benefits

- ADSL (Annex A/B), ADSL2+ (AnnexA/B) and VDSL2 PIMs available
- Emulates CPE (ATU-R / VTU-R)



Description		Cat. No.
MultiPRO ADSL	MultiPRO Tester with ADSL Interface for testing Data, VoIP and Video via 10/100 Ethernet and ADSL(2+) (Annex A and B). Includes full size carry case, PSU, Ethernet crossover and straight cables, RJ-11, RJ-45 and Plug/Clip DSL cables and user guide.	RMA00000
MultiPRO ADSL Plus	MultiPRO Tester with ADSL PIM for testing Data, VoIP and Video, including Video MOS and Advanced QoS, via 10/100 Ethernet and ADSL (2+) (Annex A and B). Includes full size case, PSU, Eth x-over and straight cables, RJ-11 and RJ-45 DSL cables, user guide.	RMAP0000
ADSL PIM	ADSL Pluggable Interface Module for conversion of any MultiPRO to MultiPRO ADSL or MultiPRO Plus to MultiPRO ADSL Plus. Includes RJ-11, RJ-45 and Plug/Clip DSL cables.	RMAUP000
MultiPRO DSL (A)	MultiPRO Tester with DSL Interface for testing Data, VoIP and Video via 10/100 Ethernet and ADSL(2+) (Annex A) and VDSL. Includes full size carry case, PSU, Ethernet crossover and straight cables, RJ-11 and Plug/Clip DSL cables and user guide.	CMUA0000
MultiPRO DSL (A) Plus	MultiPRO Tester with DSL PIM for testing Data, VoIP and Video, including Video MOS and Advanced QoS, via 10/100 Ethernet and ADSL (2+) (Annex A) and VDSL. Includes full size case, PSU, Eth. x-over and straight cables, RJ-11 + Plug/Clip DSL cables, user guide.	CMUAP000

Ordering information



MultiPRO DSL (B)	MultiPRO Tester with DSL Interface for testing Data, VoIP and Video via 10/100 Ethernet and ADSL (2+) (Annex B) and VDSL. Includes full size carry case, PSU, Ethernet crossover and straight cables, RJ-11, RJ-45 and Plug/Clip DSL cables and user guide.	RMUB0000
MultiPRO DSL (B) Plus	MultiPRO Tester with DSL PIM for testing Data, VoIP and Video, including Video MOS and Advanced QoS, via 10/100 Ethernet and ADSL (2+) (Annex B) and VDSL. Includes full size case, PSU, Ethernet x-over and straight cables, RJ-11 and RJ-45 DSL cables, user guide.	RMUBP000
DSL (A) PIM	VDSL (+ADSL Annex A) Pluggable Interface Module for conversion of any MultiPRO to MultiPRO DSL (A) or MultiPRO Plus to MultiPRO DSL (A) Plus. Includes RJ-11 and Plug/Clip DSL cables.	CMUAUP00
DSL (B) PIM	VDSL (+ADSL Annex B) Pluggable Interface Module for conversion of any MultiPRO to MultiPRO DSL (B) or MultiPRO Plus to MultiPRO DSL (B) Plus. Includes RJ-11, RJ-45 and Plug/Clip DSL cables.	RMUBUP00
MultiPRO DSL (A)	MultiPRO Tester with DSL Interface for testing Data, VoIP and Video via 10/100 Ethernet and ADSL (2+) (Annex A) and VDSL. Includes full size carry case, PSU, Ethernet crossover and straight cables, RJ-11 and Plug/Clip DSL cables and user guide.	CMUA0000
DSL (B) PIM	VDSL (+ADSL Annex B) Pluggable Interface Module for conversion of any MultiPRO to MultiPRO DSL (B) or MultiPRO Plus to MultiPRO DSL (B) Plus. Includes RJ-11, RJ-45 and Plug/Clip DSL cables.	RMUBUP00

## MultiPRO SDH

MultiPRO SDH is a comprehensive tester for installation and maintenance of SDH, PDH and Ds-n networks up to 2.5Gb/s. With its auto-configuration and pass/fail results structure it allows non SDH experts to master the complex world of SDH testing with ease.



## Features and Benefits

- BERT, performance, traffic generation and physical layer tests
- Optical and electrical interfaces
- Graphical histogram display of results
- Supports all parts of the hierarchy up to STM-16

Description		Cat. No.
MultiPRO SDH STM-16 Plus	MultiPRO Tester with SDH PIM for Advanced testing of PDH/SDH services up to STM-16 (and Advanced Triple Play, via 10/100 Ethernet.) Includes full size case, PSU, Ethernet x-over and straight cables, BNC cable, CofC and user guide. Does not include SFP.	RM16P000
MultiPRO SDH STM-1	MultiPRO Tester with SDH PIM for testing PDH/SDH services up to STM-1. (Can also test Triple Play services via 10/100 Ethernet.) Includes full size carry case, PSU, Ethernet crossover and straight cables, BNC cable, CofC and user guide. Not including SFP.	RM600000
MultiPRO SDH STM-4 Plus	MultiPRO Tester with SDH PIM for Advanced testing of PDH/SDH services up to STM-4 (and Advanced Triple Play, via 10/100 Ethernet.) Includes full size carry case, PSU, Ethernet x-over and straight cables, BNC cable, CofC and user guide. Not including SFP.	RM640000
SDH PIM	SDH Pluggable Interface Module for conversion of any MultiPRO to MultiPRO SDH. Includes BNC cable and Certificate of Calibration. Does not include any SFP.	RM6UP000
Accessories		
VoIP Headset	Headset for use with MultiPRO and UniPRO VoIP function	022758
Copper Pair Tracer Probe	Non-contact cable tracing probe for use with MultiPRO Copper Transponder. Includes battery.	024241
SDH Cable Kit	SMB-BNC, 120ohm RJ-45 crossover and Plug/Clip cables for use with MultiPRO SDH and MultiPRO SDH Plus.	M6CK00
SDH Fibre Kit	STM-1 Fibre Kit for use with MultiPRO SDH. Includes 1310 and 1550 nm SFP (Small Form factor Pluggable) transceivers, 15dB attenuator for Short Haul applications, and Duplex LC cable.	M6FK00
SDH Plus Fibre Kit	STM-16 Fibre Kit for use with MultiPRO SDH and MultiPRO SDH Plus. Supports all SDH/PDH rates up to STM-16. Includes 1310 and 1550 nm SFP (Small Form factor Pluggable) transceivers, 15dB attenuator for Short Haul applications, and Duplex LC cable.	M6PFK0
GbE Fibre Kit LX	1000BASE-LX Fibre Kit. Includes 1310nm SFP (Small Form factor Pluggable) LX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor.	MGKX2
GbE Fibre Kit SX	1000BASE-SX Fibre Kit. Includes 850nm SFP (Small Form factor Pluggable) SX transceiver, LC/LC and LC/SC duplex multimode cables and SC/SC duplex adaptor.	MGKSX1
GbE Fibre Kit ZX	1000BASE-ZX Fibre Kit. Includes 1550nm SFP (Small Form factor Pluggable) ZX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor.	MGKZX3



## UniPRO GbE

### Quick and Efficient Ethernet Service Testing

UniPRO GbE is a low-cost, high-value tester designed for the roll-out and maintenance of Access, Metro and Carrier Ethernet networks. Thanks to its dual optical and electrical ports, the tester can be connected to any point on the network. The complete set of features of UniPRO GbE enables you to thoroughly verify any Ethernet service from the physical layer to the IP layer.

UniPRO GbE is an efficient field tester that combines simplicity with advanced features, supporting all the latest Ethernet and IP standards.

UniPRO GbE has two electrical RJ-45 interfaces and two optical SFP GBICs which make bidirectional traffic monitoring really easy.



Physical Interfaces	
Dual Electrical	10/100/1000 Mbit/s RJ-45
Dual Optical	100/1000 Mbit/s SFPs
Loopback operation	Physical (L1), Ethernet (L2) and IP(L3)
Testing	
Modes	End point, Through mode, Monitor Mode
Tests	Cable tests, optical power, PoE, autonegotiation RFC 2544, Traffic statistics, QoS statistics, BERT Ping and trace-route, User configurable Error Insertion
UniPRO GbE Loopback only	Optional
Traffic Generation	Generation of custom MAC frames, VLAN frames, Q-in-Q frames, IPv4 and IPv6 over Ethernet Generation of Ethernet user priority bits, IP ToS/DSCP bits
Custom bandwidth profiles	Constant, burst and ramp
Results	LED set for test status; Frame Stats, Error Counts, QoS Stats, PoE, Physical Link, Stats
General	
Dimensions	120 (W) x 270 (H) x 60 (D)
Weight	Approximately 1 kg
Battery life	Minimum 4 hrs

Description	Cat. No.	
UniPRO GbE DE	UniPRO Gigabit Ethernet Tester with dual Electrical Ethernet test ports. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGDE000
UniPRO GbE DE Plus	UniPRO Gigabit Ethernet Tester with dual Electrical Ethernet test ports and Multistreaming, Asymmetrical RFC2544 and Top Errors. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGDEP00
UniPRO GbE Duo	UniPRO Gigabit Ethernet Tester with dual Optical and Electrical Ethernet test ports. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGDOE00
UniPRO GbE Duo Plus	UniPRO Gigabit Ethernet Tester with dual Optical and Electrical Ethernet test ports and Multistreaming, Asymmetrical RFC2544 and Top Errors. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGDOEP0
UniPRO GbE Loop	UniPRO Gigabit Ethernet Loopback Unit with single Optical and Electrical Ethernet ports. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGL0000
UniPRO GbE SE	UniPRO Gigabit Ethernet Tester with single Electrical Ethernet test port. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGSE000
UniPRO GbE SE Plus	UniPRO Gigabit Ethernet Tester with single Electrical Ethernet test port and Multistreaming, Asymmetrical RFC2544 and Top Errors. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGSEP00
UniPRO GbE Solo	UniPRO Gigabit Ethernet Tester with single Optical and Electrical Ethernet test ports. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGSOE00
UniPRO GbE Solo Plus	UniPRO Gigabit Ethernet Tester with single Optical and Electrical Ethernet test ports and Multistreaming, Asymmetrical RFC2544 and Top Errors. Includes carry case, PSU, Ethernet cable, Certificate of Calibration and user guide.	RPGSOEP0

Accessories		
GbE Fibre Kit LX	1000BASE-LX Fibre Kit. Includes 1310nm SFP (Small Form factor Pluggable) LX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor.	MGKX2
GbE Fibre Kit SX	1000BASE-SX Fibre Kit. Includes 850nm SFP (Small Form factor Pluggable) SX transceiver, LC/LC and LC/SC duplex multimode cables and SC/SC duplex adaptor.	MGKSX1
GbE Fibre Kit ZX	1000BASE-ZX Fibre Kit. Includes 1550nm SFP (Small Form factor Pluggable) ZX transceiver, LC/LC and LC/SC duplex single mode cables and SC/SC duplex adaptor.	MGKZX3



## UniPRO VoIP

### Compact Testing Solution for VoIP and VoWLAN

UniPRO VoIP is a compact tester for wired and wireless VoIP service verification. Its rugged, light and bespoke design makes it suitable for field technicians working for service providers and enterprises. UniPRO VoIP offers real-time MOS measurement rating of emulated VoIP calls, SIP Message traces and analysis of data services.

#### Specifications

Physical Interfaces	2 x 10/100BASE-T Ethernet full duplex IEEE 802.11b/g WiFi
Tests	VoIP phone emulation
SIP message trace	Traffic statistics (IP, Ethernet, WiFi) and QoS statistics (packet loss, delay and jitter) MOS and R-Factor analysis; Ping and Traceroute; FTP, HTTP tests
Additional Features	Support for DHCP and PPPoE with PAP and CHAP; Support of WEP and WPA for wireless Support of STUN for NAPT transversal



#### Features and Benefits

- Quick boot up time and long battery life
- Rugged design
- Wired and wireless VoIP telephone emulation
- Web Interface
- MOS and R factor rating of VoIP Calls
- SIP protocol trace
- HTTP and FTP performance tests

#### Ordering information

Description	Cat. No.
UniPRO VoIP UniPRO Tester for testing SIP Voice over IP services via 10/100 Ethernet and WiFi connections, with Advanced QoS tests. Includes carry case, PSU, Ethernet cable and user guide.	RPPX0000

## MC2+

### Compact One Button ADSL/ADSL2/ADSL2+ testing solution

The MC2+ is a cost-effective tester for the installation and maintenance of ADSL, ADSL2 and ADSL2+ networks. Designed for both field applications and telephone exchanges, this tester quickly checks all network layers, detecting any issue affecting them. Test results are presented by using a line identification ringer, multicolour LEDs and an easy-to-read screen.

### Features and Benefits

- Small, robust and cost-effective
- Quick and easy automatic testing
- Endpoint and Through modes
- Full ADSL, ADSL2, ADSL2+ and RE-ADSL2 support
- IP ping test
- Impulse Noise Protection up to level 5
- Supports ITU-T G.dmt, G.lite and ANSI T1.413
- One-button result display
- Connection rate, line attenuation and noise margin
- Remote control



### Ordering information

Description		Cat. No.
MC2+	MC2+ ADSL (2+) (AnnexA and Annex M) Tester with Display. Includes batteries, PSU/Charger, vehicle power adaptor, carry bag, user guide, RJ-11 DSL cable, 4mm Plug/Clip DSL Cable and Ethernet Cable	RMCD0000
Accessories		
Battery / Charger Kit	Set of batteries, charger unit with Euro mains plug and vehicle adaptor lead for MC2+	023597
MC2+ Rechargeable Batt Set	MC2+ Rechargeable Batteries Set	121050

### Specifications

Physical Interfaces	
ADSL	ADSL2+, ADSL2, G.DMT, RE-ADSL, G.Lite, T1.413 (RJ-11)
10/100 Base-T (RJ-45)	For hosted mode
USB	For hosted mode
Main Functions	
Modem emulation:	Endpoint, Routed mode, bridged mode
Support	PPPoE, PPPoA & IPoA;
PSTN	POTS/ISDN line voltage detect: POTS ringer
PING	IP Endpoint reach-ability test
Configurations	Recall/Save configuration, Pass/Fail threshold, Web based configuration
Test status LEDs:	Battery, Power, Line, ADSL, PPP/IP
Results	ADSL parameters including; Upto 16 results stored on the product (with Display option)
General	
Weight	400 g (batteries included)
Dimensions	90 mm x 140 mm x 45 mm,
Operating temperature range	0 °C to +40 °C
Optional	2 line backlit monochrome LCD display (giving extra results)



## UniPRO Gbis G.SHDSL Tester

UniPRO Gbis is a revolutionary tool for testing all types of G.SHDSL service. It combines a state-of-the-art DSL engine with a range of useful copper layer fault checks into a compact, hand-held, battery-powered tester.

Designed with the field engineer in mind, UniPRO Gbis provides the ultimate in ease of use, pinpointing common network faults and checking service performance directly from switch on with minimal setup. It supports the latest G.SHDSL standard, G.SHDSL.bis, as well as legacy versions of the technology, which are widely deployed for the provision of multi-pair DSL access to business applications. Up to 4 copper pairs can be tested simultaneously and can

be bonded together using ATM (Asynchronous Transfer Mode) or EFM (Ethernet in First Mile) encapsulation to provide up to 22.784Mbps of symmetrical bandwidth.

UniPRO Gbis can be programmed with acceptance targets for the main G.SHDSL performance parameters, providing a simple Red/Green, Pass/Fail test. Results can be stored in the tester and simply uploaded to a USB memory stick for analysis and reporting in a PC environment. With its optional CO (STU-C) emulation, UniPRO Gbis is equally useful in the Distribution Frame, at the street cabinet or in the customer's premises

### Features and Benefits

- Instant switch ON and test**  
 Network faults can be found in seconds, saving valuable technician time
- Copper fault finding**  
 Gross cable faults can be eliminated without the need for high levels of operator skill
- Simultaneous testing of up to 4 pairs**  
 No need to test cables individually. Bonded aggregate performance of all pairs can easily be checked
- Main results on one screen**  
 All the important results are presented on the home screen, direct from switch-on, with no user intervention. Saves time and operator skill requirement.
- Detailed results for each pair**  
 One button press reveals the detailed performance of each pair
- Simple setup using Multifunction Softkeys**  
 Very easy test and system setup. Negligible training needed.
- Performance threshold target setting and comparison**  
 Service level targets can be pre-set before deployment, maximising productivity of the user in the field
- Result memory and USB export, with timestamp and tester identification**  
 One-button result saving allows the performance of multiple jobs to be uploaded for later analysis and reporting. Automatically records when the test was performed and on which tester

- Robust construction and long battery life**  
 Always ready for work
- Highly visible user interface**  
 Effective in all field situations
- Integral hanging/carrying Strap**  
 Can be hooked on to plant or in frames where working space is limited



Physical Layer Tests	
Line Voltage	Up to 50 volts DC wetting current is allowed. DC span powering is not supported
Automatic Fault Detection (for each pair separately)	Up to 50 volts DC wetting current is allowed. DC span powering is not supported. Open circuit. Short circuit. Excessive Voltage (eg ISDN or DC span power). Alien xDSL service (eg ADSL or VDSL). Indication on display and LED
DSL Layer Tests	
Emulation	CPE (Customer Premise modem / router – STU-R). CO (Central Office DSLAM – STU-C) - Optional
DSL Support	G.SHDSL / G.SHDSL.bis / Auto. ATM / EFM Bonding. 1 / 2 / 3 / 4 pairs
Automatic Synchronisation (for each pair separately)	Seeking / Training / Data Mode Indication on display and LED
Results (for each pair separately)	Data Rate. Attenuation. Noise Margin. Signal Quality (Noise Margin Stability). Transmit Power. Uptime. Drops count.
Pass / Fail (for each pair separately)	Comparison with user-settable targets Indication on display and LED
Results (for bonded aggregate)	Data Rate. Comparison with user-settable target. Indication on display and LED
General	
Dimensions and Weight:	280 x 180 x 50 mm/1.8 kg
Display	3.5" Colour backlit LCD
Battery	Nickel Metal Hydride/, Autonomy: 4 hours typical

Note: This product is not suitable for testing SHDSL connections which are configured to transport TDM payloads with plesiochronous clocking.

Description		Cat. No.
UniPRO Gbis	UniPRO Gbis 4-pair SHDSL / G.SHDSLbis tester with CPE emulation plus EFM/ATM Bonding. Includes PSU, carry bag, carry strap, quick reference card, full user guide on CD, RJ-45 DSL cable and RJ-45 to 8 x 4mm Plug/Clip DSL cable.	RPB00000
UniPRO Gbis CO Plus	UniPRO Gbis 4-pair SHDSL / G.SHDSLbis tester with CPE and CO emulation plus EFM / ATM bonding. Includes PSU, carry bag, carry strap, quick reference card, full user guide on CD, RJ-45 DSL cable and RJ-45 to 8 x 4mm Plug/Clip DSL cable.	RPBCP000
Accessories		
RJ-45 / 8-4mm PLG CRC CLP 2M LF	RJ-45 TO 8-4mm PLUGS CROC CLIPS 2M LF	123300

Specifications

Ordering information

## AuroraPRESTO The Complete Test Tool for DSL Technology

Aurora Presto offers all the functionality needed for the installation, maintenance and troubleshooting of Asymmetrical Digital Subscriber Line (ADSL, ADSL2, ADSL2+) and Symmetrical High Speed Digital Subscriber Line (SHDSL) services, in both laboratory and field environments.



Physical Interfaces	
ADSL	ADSL, ADSL2, ADSL2+, G.SHDSL
Including	ATM, PPP and IP layer support
Tests	
Modes	DSL Termination Modes, Golden Modem mode
IP Tests	WAN Global Stats, LAN Global Stats, LAN/WAN PING Trace Route, Internet download
Other tests	TDR (Time Domain Reflectometer) & DMM (Digital Multi-meter) Automatic Test Mode
General	
Weight	1.1 kg
Dimensions	285mm(l) x 100mm(w) x 87mm(d)
Operating Temperature	0 °C to 45 °C
Display	Backlit 21 characters by 8
Battery	Rechargeable NiMH
Water resistance	IP22

Specifications

Description	Cat. No.
Presto ADSL	RACAX000

Accessories		
Battery Pack 5HR-4/3AU 3.8AH	Battery Pack 5HR-4/3AU 3.8AH for Sonata / Presto	427402
Short Line Adaptor Assy 20db	Short Line Adaptor for use when working on short cable lengths in close proximity to the DSLAM (20db)	480152
Short Line Adaptor Assy 40dB	Short Line Adaptor for use when working on short cable lengths in close proximity to the DSLAM (40dB)	480153
ADSL Cbl RJ-11-2x4mm Plg/Clp	RJ-11 Line cables terminated with banana plugs and crocodile clips for ADSL.	480305
ADSL Test Cable RJ-11 - RJ-11	RJ-11 plug to RJ-11 plug 6 way straight wired line cable	480350
ADSL Tst Cable RJ-11/RJ-11 Xover	RJ-11 plug to RJ-11 plug, cross-over line cable (wired pins 2&5 to pins 3&4) for ADSL	480351
ATM25 Card Cbl RJ-45/RJ-45 Xover	RJ-45 plug to RJ-45 plug CAT5 ATMF 25.6 cable with cross-over wiring (length 2m).	480352

Ordering information

## AuroraSONATA The Most Versatile ISDN Tester in the Market

The AuroraSONATA is an all-purpose ISDN test tool for field technicians. Available as either a Basic or Primary Rate only configuration or as a combined unit, it provides all the capability needed by technicians to identify most problems.



Physical Interfaces	
S/T 192 kbps to ITU 1.430	RJ-45 connector
2.048Mbps to ITU G.703	75ohm unbalanced/120ohm balanced RJ-45
U Interfaces	Upo, 4B3T & 2B1Q
POTS Interface	RJ-11
Tests	
ISDN	ISDN G.703/G.704 statistics FAS/NFAS word 3.1KHz and ISDN voice call via selected B channel Support for many supplementary services
General	
Weight	1.1 kg
Dimensions	285mm(l) x 100mm(w) x 87mm(d)
Operating Temperature	-25oC - +70oC (ETSI 300 019 -1 class 1.2)
Display	Backlit 21 characters by 8
Battery	Rechargeable NiMH
Water resistance	IP22 Drop Test 2M

Specifications



Description	Cat. No.	
Sonata PRI P	AuroraSONATA ISDN Primary Rate tester with POTS. Includes PSU, standard carry bag, User Guide, RJ-45 cable, 4mm Plug/Clip POTS cable, RJ-45 T-Piece and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASEP000
Sonata PRI	AuroraSONATA ISDN Primary Rate tester. Includes PSU, standard carry bag, User Guide, RJ-45 cable, 4mm Plug/Clip PRI cable, RJ-45 T-Piece and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASEX000
Sonata BRI S	AuroraSONATA ISDN Basic Rate tester with S Interface. Includes PSU, standard carry bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASS0000
Sonata Combi S	AuroraSONATA ISDN PRI/BRI Rate tester with S Interface. Includes PSU, large case, User Guide, RJ-45 S/PRI i/f cable, 4mm Plug/Clip PRI cable, RJ-45 T-Piece and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASSE000
Sonata Combi SP	AuroraSONATA ISDN PRI/BRI tester with S Interface and POTS. Includes PSU, large case, User Guide, RJ-45 S/PRI i/f cable, RJ-45 T-Piece, 4mm Plug/Clip POTS and PRI cables and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASSEP00
Sonata BRI SP	AuroraSONATA ISDN Basic Rate tester with S Interface and POTS. Includes PSU, standard carry bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece, 4mm Plug/Clip POTS cable and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASSP000
Sonata BRI Q	AuroraSONATA ISDN Basic Rate tester with S and 2B1Q U Interfaces. Includes PSU, standard carry bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece, 4mm Plug/Clip U i/f cable and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASSQ000
Sonata Combi Q	Sonata ISDN PRI/BRI tester with S and 2B1Q U interfaces. Includes PSU, large case, User Guide, RJ-45 S/PRI i/f cable, RJ-45 T-Piece, 4mm Plug/Clip PRI, U i/f and RS-232 PC cables. Includes all available protocols and Aurora Expert PC s/w.	RASSQE00
Sonata Combi QP	Sonata ISDN PRI/BRI tester with S and 2B1Q U I/Fs and POTS. Includes PSU, large carry case, User Guide, RJ-45 S/PRI i/f cable and T-Piece, 4mm Plug/Clip POTS, PRI & U i/f cables and RS-232 PC cable. Includes all available protocols and Aurora Expert PC s/w.	RASSQEPO
Sonata BRI QP	AuroraSONATA ISDN Basic Rate tester with S and 2B1Q U Interfaces and POTS. Includes PSU, standard bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece, 4mm Plug/Clip POTS & U i/f and RS-232 PC cables. Includes all available protocols and Aurora Expert PC software.	RASSQP00
Sonata Combi 2QP	Sonata ISDN PRI/BRI tester with S and Dual 2B1Q(Mon) U I/Fs and POTS. Includes PSU, large carry case, User Guide, RJ-45 S/PRI i/f cable and T-Piece, 4mm Plug/Clip POTS, PRI & U i/f cables and RS-232 PC cable. Includes all protocols, Aurora Expert PC s/w.	RASSQQEP
Sonata BRI T	AuroraSONATA ISDN Basic Rate tester with S and 4B3T U Interfaces. Includes PSU, standard carry bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece, 4mm Plug/Clip U i/f cable and RS-232 PC cable. Includes all available protocols and Aurora Expert PC software.	RASST000
Sonata Combi T	Sonata ISDN PRI/BRI tester with S and 4B3T U interfaces. Includes PSU, large case, User Guide, RJ-45 S/PRI i/f cable, RJ-45 T-Piece, 4mm Plug/Clip PRI, U i/f and RS-232 PC cables. Includes all available protocols and Aurora Expert PC s/w.	RASSTE00
Sonata Combi TP	Sonata ISDN PRI/BRI tester with S and 4B3T U I/Fs and POTS. Includes PSU, large carry case, User Guide, RJ-45 S/PRI i/f cable and T-Piece, 4mm Plug/Clip POTS, PRI & U i/f cables, and RS-232 PC cable. Includes all available protocols and Aurora Expert PC s/w.	RASSTEPO
Sonata BRI TP	AuroraSONATA ISDN Basic Rate tester with S and 4B3T U Interfaces and POTS. Includes PSU, standard bag, User Guide, RJ-45 S i/f cable, RJ-45 T-Piece, 4mm Plug/Clip POTS & U i/f and RS-232 PC cables. Includes all available protocols and Aurora Expert PC software.	RASSTP00
<b>Accessories</b>		
U I/F Cbl(RJ-11-4mm Plgs+Clips)	,U' Interface cable, complete with 4mm Banana plugs and crocodile clips.	420305
RJ-45 3 Way ,T' Piece	RJ-45 3 way T-piece for PRI and BRI monitoring	421474
U2V4 Phantom Power Feed Unit	U2V4 Phantom Power Feed Unit	427131
S Bus Phantom Power Feed Unit	,S' Bus Phantom Power Feed Unit	427150
Accy Cable RJ-45 - 75 OHM BNC	RJ-45 connector cable terminated with two BNC connectors (for E1 circuits)	427352
Sonata RJ-45 to Type 43 Cbl PRI	75 Ohm connector cable terminated with two BT Type 43 jacks. For PRI option only.	427353
FCC68 4-4 Crc Clips cbl - POTS	FCC68 4-4 to Crocodile Clips cable for POTS	427354
Battery Pack 5HR-4/3AU 3.8AH	Battery Pack 5HR-4/3AU 3.8AH for Sonata / Presto	427402

# ***Tools, Connectors and Accessories***

As well as network testing, IDEAL INDUSTRIES NETWORKS specialises in the whole installation process from start to finish. From cable pulling, connectors and plugs to high precision installation tools, everything needed by the installer is here.

For data cable preparation and connector termination we have all of the essential tools including strippers, crimpers and punch down tools etc. In fibre where cleanliness and precision are critical, top class stripping tools, serrated cutters, polishers & cleaning kits are available to ensure the highest quality joints are achieved.

We offer various modular plugs including RJ-11 and RJ-45's as well as compression connectors, F-Type connectors and splitters etc. For added convenience and value, a range of tailored tool and connector kits are also available in one tidy and tough case.

And finally, our range includes the pulling rods and world renowned Yellow 77 pulling lubricant in order to get that cable through tight spots.

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## **COPPER CABLE INSTALLATION TOOLS, ACCESSORIES AND LUBRICANTS**

### **Data T<sup>®</sup> - Cutter**

Cuts round communication and structured wiring cables and maintains cable geometry for better cable performance. Data T<sup>®</sup>-Cutter cuts multi-pair cable up to .500 in. (12.7 mm) and coaxial cable up to RG-9/U. Blade cutting capabilities suitable for soft cables (not ACSR).



- Steel reinforced centre conductors can be trimmed with bolt cutting holes
- Cushioned comfort grip handles
- Locking latch keeps tool closed in pouch

Description	Cat. No
Data T <sup>®</sup> -Cutter	45-074

### **Lever<sup>™</sup> Snips Electrician's Scissors with Stripping Notches**



- Ergonomic design gives added leverage
- Spring-action, mechanical advantage increases stripping leverage and reduces operator fatigue
- Double plated for added rust protection
- Extra-deep serrations grip wire better

Description	Cat. No.
Electrician's Scissors with Stripping Notches	35-087

### **Electrician's Scissors**



- Designed for use in telephone and electrical service applications
- Cut up to 1.5mm<sup>2</sup> solid and 4.0mm<sup>2</sup> stranded wire
- Serrated surface on back blade edge cleans wire
- Electrician's Scissors with stripping notches

Description	Cat. No.
Electrician's Scissors w/stripping notches	35-088

### **Twin & Earth Cable Stripper**



Works great on Category 5 Cable!

- Self-adjusting stripping blades automatically select proper position
- Neatly removes outer cable sheath and then inner wire sheathing to desired lengths
- Strips Twin and Earth cable
- Open-throat construction allows unlimited strip length

Description	Cat. No
Underground Feeder Cable Stripper	45-235
Replacement blade set	45-234



## Copper Cable Installation Tools, Accessories and Lubricants

### Coax/UTP Cable Stripper

Features a primary and secondary strip cartridge



- Strips UTP, RG-59 and RG-6 coax cable
- Rotates easily around finger
- Push-on ring for easy connector termination

Description	Cat. No
Coax/UTP Cable Stripper	45-603

### Cyclops® Data Cable Stripper

Fast, easy removal of outer sheath insulations (PVC and Plenum types) from all Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP) and multicore cables up to .433 in./11 mm in diameter



- Strips UTP, RG-59 and RG-6 coax cable
- Rotates easily around finger
- Push-on ring for easy connector termination

Description	Cat. No
For Unshielded and Shielded Twisted Pair Cable	45-514

### UTP/STP/Coaxial Cable Strippers

Adjustable blades can be set for any depth to help ensure nick-free strips



Description	Typical RG Cables	Cat. No.
Coaxial Cable Stripper, up to 1/8 in. (3.2mm) O.D	RG-174, RG-187	45-162-341 (Gray)
Coaxial Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D.	RG-58, Mini Coax	45-163-341 (Blue)
Coaxial Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D.	RG-11, RG-8	45-164-341 (Blue)
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D.	RG-59, UTP Cable	45-165-341 (Black)
Replacement Blade Set* for 45-162, 45-163, 45-165	-	L-9225
Replacement Blade Set* for 45-164	-	L-9226

\*A set of blades consists of three straight blades and one round blade.

### UTP Cable Stripper

Strips and cuts flat telephone cable easily. Cuts outer insulation without nicking inner conductors.



- Strips Cat 3, 5, 5e & 6 cables
- One-step stripping

Description	Cat. No
UTP Cable Stripper	45-167



## Round Cable Slitting and Ringing Tool



- Great for large diameter structured wiring cables
- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 44.45 mm O.D.
- Blade adjusts for jacket thicknesses up to 3.175 mm
- Spare blade in handle base

Description	Cat. No
Round Cable Slitting and Ringing Tool	45-144
Replacement Blades for 45-144 (2/pkg.)	LB-1748

## Cable Splicing Kit



- Kit designed for use in telephone and electrical service applications
- High carbon steel blade in Splicing Knife remains sharp and cuts easily through many insulation types
- Kit includes Scissors, Splicing Knife and Leather Holder

Description	Cat. No
Cable Splicing Kit (Scissors, Splicing Knife, Leather Holder)	35-093

## Punch Down Tools

35-185  
**Economy Punch Down Tool**

35-407  
**Punch Down Tool 110 66 Combo Blade with Cutting Edges**

35-485  
**Punchmaster™ II Punch Down Tool with 110 Blade**

35-492  
**Non-Impact Turn-Lock™ Style Punch Down Tool with 110 Blade**

35-495  
**Replacement Blade, Punchmaster™ II Turn-Lock™ Style 110 Blade**



Impact Turn-Lock™ Punch Down Tools	Cat. No
Punchmaster™ II Punch Down Tool - body only	35-483
Punchmaster™ II Punch Down Tool w/110 blade	35-485
Punchmaster™ II Punch Down Tool w/66 blade	35-487

Non-Impact Turn-Lock™ Punch Down Tools	Cat. No
Punch Down Tool w/110 blade	35-492
Punch Down Tool w/66 blade	35-493

Economy Punch Down Tool	Cat. No
Punch Down Tool (insertion tool for Krone Blocks)	35-482
Non-impact Tool w/permanent non-cut blade**	35-185

Removable Blades*	Cat. No
110 Turn-Lock™ blade	35-495
66 Turn-Lock blade	35-497
110/66 combo blade w/cutting edges	35-407
Krone® blade	35-478
Bix® blade	35-495
Krone Style Punch Down Blade for 35-482	ND-3851

\*Not applicable for Economy Punch Down tool.

\*\*35-185 is made in Taiwan.

Bix® is a registered trademark of Nortel. Krone® is a registered trademark of Krone, Inc.

## Copper Cable Installation Tools, Accessories and Lubricants

### Ratchet Telemaster™



- For paired conductors
- Ratchet version of popular Telemaster™ Tool for RJ-45 and RJ-11 modular plugs
- Repeatabe crimp action for consistent, high quality connections

Description	Cat. No
Ratchet Telemaster™	30-696

### Telemaster™ Telephone Tools



- For paired conductors
- Multi-function telephone tool cuts, strips and crimps for easy one-tool application
- Steel frame for long-term durability. (Crimps primary modular plug strain relief only)

Description	Kit Cat. No.	Tool Only Cat. No.
Tool for RJ-11 (1, 2, 3 pair) and RJ-45 (4 pair) Plugs	33-700*	30-496-001
Tool for RJ-45 (4 pair) & DECconnect MMJ (RJ-11, 3 pair)	N/A	30-497
Tool for RJ-22 (handset) and RJ-11 (1, 2, 3 pair)	N/A	30-499
Replacement Cut and Strip Blade Set for Telemaster™	N/A	LB-1747

\* Kit includes 10 each, RJ-45 8P8C, RJ-11 6P6C and RJ-45 6P4C plugs.

### Modular Plug Tool Kit



- Multi-function telephone/network tool; cuts, strips and crimps
- Steel frame construction for durability
- Interchangeable dies allow for crimping RJ-45 and RJ-11 modular plugs
- Tool-less die change for added convenience
- Spring return handle for comfort

Description	Cat. No
Modular Plug Tool Kit - includes ten each RJ-11, 6P4C Telephone Plugs & RJ-45, CAT 5e Data Plugs, RJ-11 & RJ-45 Die Sets	33-296

### Crimpmaster™ Crimp Tools & Die Sets



Description	Kit Cat. No.	Tool Only Cat. No.
Crimpmaster™ Crimp Tool Frame	30-506	--
RJ-45 Eight-position Crimp Tool for AMP RJ-45 modular plugs	30-521	30-560
RJ-45 Eight-position Crimp Tool for keyed or non-keyed modular plugs	30-522	30-559
RJ-11 Crimp Tool for two, four or six-position modular plugs	--	30-556



## Modular Plug Replacement Die Sets For Crimpmaster™ 30-506 Frame



30-556

Crimpmaster™ RJ-11 die set for two, four or six-position modular plugs



30-559

Crimpmaster™ RJ-45 eight-position die set for keyed or non-keyed modular plugs (excluding AMP).

Tool w/die 30-522



30-560

Crimpmaster™ RJ-45 AMP die set for eight-position modular plugs. Primary strain relief crimp bar is located further back on die/modular plugs. Tool w/die 30-521

## Technician's Service Kit

Kit 33-505 Includes:



Kit includes tools to install twisted pair cable on blocks and data jacks.

Description	Qty.	Cat. No.
Punchmaster™ II Punch Down Tool w/110 Blade	1	35-485
Punchmaster™ II 66 Blade only	1	35-497
Electrician's Scissors w/stripping notches	1	35-088
UTP/STP Stripper	1	45-165
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	1	35-908
Probe Pick and Spudger	1	35-473
Nylon case	1	62-205

## Data/Video Kit

Kit 33-917 Includes:



Description	Qty.	Cat. No.
Data T®-Cutter	1	45-074
Twist-a-Nut™ 7-in-1 Screwdriver	1	35-908
UTP Stripper	1	45-165
Coax Stripper w/Replaceable Cartridge	1	45-526
Punchmaster™ II Punch Down Tool w/110 Blade	1	35-485
110/66 Blade Combo Punch Down Blade	1	35-407
Crimpmaster™ Crimp Tool for RJ-45 Modular Plugs	1	30-522
OmniSeal™ Pro XL Compression Tool	1	30-793
Probe Pic and Spudger	1	35-473
Coax Connector Tool - F & BNC	1	35-046
VDV MultiMedia Cable Tester	1	33-856
Amplifier Probe	1	62-164
Electrician's Scissors w/Stripping Notch	1	35-088
Large Mouth Bag - 33 cm	1	35-410

## Copper Cable Installation Tools, Accessories and Lubricants

### Insulation Displacement Connectors (IDC)

IDC connectors create fast splice and tap connections on solid copper wires. Designed for low voltage telecommunication cables.



- Moisture-resistant sealant protects wires from corrosion
- Use with solid copper single-conductor wire
- Kinetic Super™ Wire Stripper/Crimper cuts and strips 0.2mm<sup>2</sup> to 0.3mm<sup>2</sup> solid wire

Description	Qty.	Cat. No.
UB-I, 2-Wire Tap Splice IDC	25	85-900
UR-I, 3-Wire Butt Splice IDC	25	85-925
UY-I, 2-Wire Butt Splice IDC	25	85-950
UR-I, 2-Wire Butt Splice IDC	100	86-925
UR-I, 3-Wire Butt Splice IDC	1000	87-925
UY-I, 2-Wire Butt Splice IDC	1000	87-950
IDC Combo Pack	25	85-960
Kinetic Super™ Wire Stripper/Crimper	1	45-719

### Blued-Steel Tuff-Grip™ Pro Fish Tapes Industry's Leading Fish Tape!



#### Features and Benefits

- Unique finish is non-oily and resists rust
- Multiple options in width and length for ease of use
- Industry's straightest wire
- Stiffer for long runs
- Highest grade carbon steel
- Tensile strength 725kg
- High column strength for longer runs
- Superior pull-out and rewind characteristics

Length m/ft.	Width & Thickness	Case Diameter	End Type Tuff-Grip™	ProBlued Steel™
18.29 / 60	0.060 cm x 0.32 cm (1/8in. x .060 in.)	30.48 cm / 12 in.	Formed hook	31-055
36.58 / 120	0.060 cm x 0.32 cm 1/8 in.x .060 in.	30.48 cm / 12 in.	Formed hook	31-056
73.15 / 240	0.060 cm x 0.32 cm 1/8 in.x .060 in.	30.48 cm / 12 in.	Formed hook	31-057

### Zoom Fish Tapes



#### Features and Benefits

- 19 strands of stainless steel
- Ultra hard nylon jacket adds slipperiness, protects cables and user's hands
- Excellent for corrugated plastic conduit
- Excellent for multiple bends or wet/corrosive work environment
- The only one in the industry

Length m/ft.	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes
15.24 / 50	3/16 in. diameter	30.48 cm / 12 in.	Eyelet	31-090	31-091
30.48 / 100	3/16 in. diameter	30.48 cm / 12 in.	Eyelet	31-092	31-093
60.96 / 200	3/16 in. diameter	40.64 cm / 16 in.	Eyelet	31-096	31-097



## S-Class® Fish Tape



- Non-conductive tape designed for use around live circuits
- Strong S-Class® core for longer life and greater pushing power
- Smooth nylon jacket provides great handling around bends
- Omni-directional pushing

Length m/ft.	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Rapid-Pak®	Replacement Tapes
15.24 / 50	3/16 in. diameter	30.48 cm / 12 in.	Leader	31-060	31-187	31-150
15.24 / 50	3/16 in. diameter	30.48 cm / 12 in.	Leader	31-062	31-190	31-160
30.48 / 100	3/16 in. diameter	30.48 cm / 12 in.	Leader	31-061	31-186	31-152
30.48 / 100	3/16 in. diameter	30.48 cm / 12 in.	Leader	31-063	31-189	31-162
60.96/ 200	3/16 in. diameter	40.64 cm / 16 in.	Leader	31-064	31-207	31-155
60.96/ 200	3/16 in. diameter	40.64 cm / 16 in.	Leader	31-065	31-208	31-165

## Tuff-Rod™ Cable Pulling Rods

Designed to meet the needs of the electrical contractor and save valuable time during the installation of cable. Used to reach and push / pull wires & cables over suspended ceilings, in cable trays and through wall cavities. Ideal's Tuff-Rod™ fishing rods are extremely strong yet lightweight and flexible.



- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and longterm storage
- Strong, lightweight & flexible fibreglass rods (6 mm/1/4 inch)
- Extendable with additional rods & accessories
- Ultra smooth gel coating helps protect hand from fibreglass
- ADDITIONAL EXTRA FLEX GLOW Features
- As Regular Flex but 5 mm (3/16 inch) luminescent fibreglass rods
- Glow-in-the-dark material for use in attics, basements and other dim lit areas

Description - Regular Flex	Cat. No.
3.6m (12 ft.) kit with fixed bullet nose and threaded J hook (3 ea. 1.2m [4 ft.] sections)	31-611
7.32m (24 ft.) kit with fixed bullet nose and threaded bullet nose (4 ea. 1.83m [6 ft.] sections)	31-612
12 pack of 0.64 cm [1/4 in.] x 1.2m [4 ft.] Replacement Rods	31-643
12 pack of 0.64 cm [1/4 in.] x 1.83m [6 ft.] Replacement Rods	31-644
Description - Extra Flex Glow	Cat. No.
3.6 m (12 ft.) kit with fixed bullet nose and threaded J hook (3 ea. 1.2m [4 ft.] sections)	31-631
9.14m (30 ft.) kit with fixed bullet nose and threaded bullet nose (5 ea. 1.83m [6 ft.] sections)	31-633
12 pack of 0.48 cm (3/16 in.) x 1.2 m [4 ft.] Replacement Rods	31-647
12 pack of 0.48 cm (3/16 in.) x 1.83 m [6 ft.] Replacement Rods	31-648
Accessory Kits	Cat. No.
0.48 cm (3/16 in.)	31-651
0.64 cm (1/4 in.)	31-652
Repair Kits	Cat. No.
0.48 cm (3/16 in.)	31-641
0.64 cm (1/4 in.)	31-642

## Wire Pulling Lubricants

Electricians have been known to use alternative solutions such as washing up liquid rather than products developed specifically as cable pulling lubricants. Independent lab tests have shown that detergents remain wet for longer periods within the conduit causing permanent damage to the cable insulation. This can lead to fire and safety risks. IDEAL's Yellow 77® is the number 1 brand of wire pulling lubricant since 1959 and is a perfect general purpose lubricant for pulling wire & cable. ClearGlide™ wire & cable pulling lubricant is a clear and colourless lubricant designed for quick and easy clean-up.

## Copper Cable Installation Tools, Accessories and Lubricants

### Yellow 77<sup>®</sup> Wire Pulling Lubricant



#### Features and Benefits

- Wax-based formula for superior lubricity
- Safe for use with most cable types except low-density polyethylene and semi-conducting jackets
- Clings to cable throughout long pulls
- Won't break down or separate after repeated exposure to freezing temperatures
- Dries to a thin, non-conductive film
- Easy to apply by hand or by brush
- Creamy texture applies easily and uniformly
- Homogeneous blend requires no mixing
- Won't dry out - surface coat forms to control evaporation
- Environmentally safe - non-toxic, non-flammable and non-corrosive

Description	Cat. No.
0.95 l (1-qt.) Squeeze Bottle	31-358
3.79 l (1-gal.) Bucket	31-351
18.93 l (5-gal.) Bucket	31-355

### ClearGlide<sup>™</sup> Cable Pulling Lubricant



\*Results from Falex Corporation, an independent testing agency specializing in tribology tests, using the Falex-ISC On Disk Tribometer System machine with the ASTM G99 modified method.

#### Features and Benefits

- Exceptional lubricity for super-fast pulls
- Polymer-based formula perfect for all electrical and datacomm applications
- Safe to use with all cable types
- Controlled evaporation rate is ideal for shorter runs
- Remains stable over wide temperature range - usable from 30°F to 180°F (-1°C to 82°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe - non-toxic, non-flammable and non-corrosive

Description	Cat	No.
0.95 l (1-qt.) Squeeze Bottle		31-388
3.79 l (1-gal.) Bucket		31-381
18.93 l (5-gal.) Bucket		31-385

Selection Guide	ClearGlide <sup>™</sup> Wire Pulling Lubricant	Yellow 77 <sup>®</sup> Wire Pulling Lubricant	Velocity <sup>™</sup> Wire Pulling Lubricant
Colour	Clear	Yellow	Cream
Base	Polymer	Wax	Polymer
Average Coefficient of Friction*	17	08	14
Safe Storage	32°F – 180°F (0°C – 82°C)	32°F – 130°F (0°C – 54°C)	40°F – 140°F (4°C – 82°C)
Application Temperature Range	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	25°F – 140°F (-3.9°C – 60°C)
COMPATIBILITY (Cable Types):			
Rubber	•	•	•
Neoprene	•	•	•
Nylon	•	•	•
PVC	•	•	•
High-density or cross-linked polyethylene	•	•	•
Low-density polyethylene	•		•
Semiconducting jacket	•		•
Hypalon	•	•	•

For more information on our full range of cable lubricants, please contact Customer Service or visit: [www.idealindustries.co.uk/lubricants](http://www.idealindustries.co.uk/lubricants)



## CONNECTORS AND TERMINATION PRODUCTS

### Data T<sup>®</sup>-Cutter

Cuts round communication and structured wiring cables and maintains cable geometry for better cable performance. Data T<sup>®</sup>-Cutter cuts multi-pair cable up to .500 in. (12.7 mm) and coaxial cable up to RG-9/U. Blade cutting capabilities suitable for soft cables (not ACSR).



- Steel reinforced centre conductors can be trimmed with bolt cutting holes
- Data T<sup>®</sup>-Cutter II designed for RG-58 and RG-6 coaxial cable
- Cushioned comfort grip handles
- Locking latch keeps tool closed in pouch

Description	Cat. No
Data T <sup>®</sup> -Cutter	45-074

### Economy Coax Cable Stripper



- For RG-6, RG-6 Quad and RG-59
- No adjustment required
- Strips centre conductor & cable jacket

Description	Cat. No
Coax Cable Stripper	45-320
Coax Connector Kit w/four RG-6 Push-On F-Connectors	33-320

### RG-11 Coax Stripper



- For use with IDEAL RG-11 compression connectors (89-211, 89-1211), provides 6.4mm x 6.4mm strip

Description	Cat. No
RG-11 Coax Stripper for Compression Connectors	45-111

### Proper Coax Strip Procedure

6.4mm x 6.4mm standard strip.



- Proper strip length settings will leave 6.4mm of the centre conductor exposed and 6.4mm of the braiding (shield) exposed.
- After stripping, make sure the tip of the centre conductor is straight and not bent. Straighten the conductor if necessary.
- Fold back the outer layer of braiding (shield) against the cable jacket. Keep the braid strands as straight and as close to the jacket as possible.
- Note: For Quad Shield cables (with four layers; outer braid, outer foil, inner braid, inner foil), first fold back the outer braiding. Use the 45-074 to score and remove the exposed 6.4mm of outer foil. Remove outer foil and fold back inner braiding.



## Connectors and Termination Products

### Coax/UTP Cable Stripper



- Features a primary and secondary active strip cartridge
- Strips UTP, RG-59, RG-6 Quad and RG-6 coax cable
- Rotates easily around finger
- Push-on ring for easy connector termination

Description	Cat. No.
Coax/UTP Cable Stripper	45-603
RG-6/6Q/59 Replacement Cartridge	LB-2726
UTP Replacement Cartridge	LB-2727

### Coax Stripmaster® Wire Strippers



- Speeds 2-step cable stripping
- Spring-action operation grips and strips in one motion
- Knife-type blades feature multiple hole diameters sized for two step removal of outer jacket insulation and centre conductor

Description	Coax Cable Type (RGU)	Repl. Blade Cat. No.	Cat. No.
Coax Stripmaster® for RG-6	RG-6	LB-740	45-262
Coax Stripmaster® for RG-59	RG-59	LB-743	45-265
Coax Stripmaster® for RG-6 Quad Shield	RG-6 Quad Shield	LA-3953	45-282
Coax Stripmaster® for RG-58	RG-58	45-264	-
Coax Stripmaster® for MediaTwist	MediaTwist	45-274	-

### Round Cable Slitting and Ringing Tool



- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.75 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base

Description	Cat. No.
Round Cable Slitting and Ringing Tool	45-144
Replacement Blades for 45-144 (2/pkg.)	LB-1748

### Cable/Satellite/CCTV Coax Stripper



- Designed for fast and easy 1/4" x 1/4" strip lengths
- Blades auto-adjust to different diameter coax cables
- Spinner ring for fast stripping
- Strips RG-6/6 Quad and RG-59 coax cable

Description	Cat. No.
Video Coax Stripper	45-321



## Coax Strippers

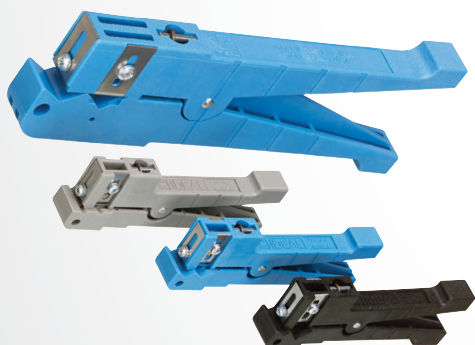


- Specific adjustments needed for each cable size

Description	Cat. No.	Cassette
Coax Stripper - 3 Step	45-520	45-522 (Black)
<ul style="list-style-type: none"> <li>• For crimp BNC and TNC conn.</li> <li>• Strips braid 0.240 in. or 6mm and Dielectric 0.240 in. or 6mm</li> </ul>		
Coax Stripper - 3 Step	45-521	45-523 (Brown)
<ul style="list-style-type: none"> <li>• For dual crimp BNC/TNC and Thinnet BNC conn.</li> <li>• For 735A Belden® cable</li> <li>• Strips braid 0.328 in. or 8.2mm and dielectric 0.109 in. or 2.7mm</li> </ul>		
Coax Stripper - 2 Step	45-526	45-524 (Blue)
<ul style="list-style-type: none"> <li>• For F-Type, many single crimp BNC/TNC's, Twist-on BNC/TNC's, Twinax and UHF conn.</li> <li>• Strips 0.250 in. or 6.35mm</li> </ul>		

## UTP/STP/Coaxial Cable Strippers

Specific adjustments needed for each cable size



- Designed for fast and easy 1/4" x 1/4" strip lengths
- Blades auto-adjust to different diameter coax cables
- Spinner ring for fast stripping
- Strips RG-6/6 Quad and RG-59 coax cable

Description	RG Cables	Cat. No.
Coaxial Cable Stripper, up to 1/8 in. (3.2mm) O.D	RG-174, RG-187	45-162-341, (Gray)
Coaxial Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D.	RG-58, Mini Coax	45-163-341, (Blue)
Coaxial Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D.	RG-11, RG-8	45-164-341 (Blue)
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D.	RG-59, UTP Cable	45-165-341, (Black)
Replacement Blade Set* for 45-162, 45-163, 45-165	-	L-9225
Replacement Blade Set* for 45-164	-	L-9226

## Coax Strip and Crimp Tool



- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Cat. No.
Coax Strip & Crimp Tool	30-433
Coax Strip & Crimp Tool Kit w/ten RG-6 F-Connectors	30-433F

## Connectors and Termination Products

### 4-Way Indent Crimp Tools

Specific adjustments needed for each cable size



- High-grade steel construction for outstanding performance

Description	Cat. No.
20-26 AWG (0.52 mm <sup>2</sup> - 0.13 mm <sup>2</sup> ) RS232 D-sub Round Barrel Contacts, Pins or Sockets	35-465
16-22 AWG (1.31 mm <sup>2</sup> - 0.33 mm <sup>2</sup> ) Round Barrel Contacts, Pins, Sockets and Deutsch 16 Pin Contacts	35-466
Trompeter BNC Connector Centre Pins	35-468

### D-Sub/Double-D Service Tool



- Exact replacement of the AMP openbarrel service tool for stamped contacts and D-Sub contacts
- Also crimps Double-D, high density, miniature contacts
- Includes openings for crimping insulated terminals and cutters for machine screws

Description Qty.	Cat. No.
D-Sub/Double-D Service Tool	30-426

### Economy Compression Tool



- Easily compresses series 6 and 59 coax compression F-connectors
- Permanent connection – never comes loose
- Works with most brands of compression connectors

Description	Cat. No.
Economy Compression Tool	30-633
Economy Compression Tool Kit - Includes four CMP RG-6 Connectors	33-633

### Insulation Displacement Connectors (IDC)

IDC connectors create fast splice and tap connections on solid copper wires. Designed for low voltage telecommunication cables.

- Moisture-resistant sealant protects wires from corrosion
- Use with solid copper single-conductor wire
- Kinetic Super™ Wire Stripper/Crimper cuts and strips 0.2mm<sup>2</sup> to 0.3mm<sup>2</sup> solid wire

Description	Qty.	Cat. No.
UR-I, 3-Wire Butt Splice IDC	25	85-925
UR-I, 2-Wire Butt Splice IDC	100	86-925
UR-I, 3-Wire Butt Splice IDC	1,000	87-925
IDC Combo Pack	25	85-960
UY-I, 2-Wire Butt Splice IDC	25	85-950
UB-I, 2-Wire Tap Splice IDC	25	85-900



85-900

85-925

85-950

### Strain Relief Boots for Modular Plugs



- Prevents broken connector tabs and snagging while extending connector life
- Minimizes cable bends that can reduce data speed and result in data loss
- Dampens cable movement and vibrations that can result in premature connector failure

Description	Qty.	Cat. No.
Strain Relief Boots for Modular Plugs	25	85-380



### Modular Plugs

- Plugs are capable of supporting the latest EIA/TIA cable system performance categories when installed in compliance with appropriate EIA/TIA standards and methods
- All plugs work with 0.2mm<sup>2</sup> solid or stranded conductors and round or flat cables.



Description	Qty.	Cat. No.
8-Position 8-Contact, RJ-45	25	85-346
	50	85-396
	100	86-396
	250	85-1396
6-Position 6-Contact, RJ-11	25	85-345
	100	86-395
6-Position 4-Contact, RJ-11	25	85-344
	50	85-394
	100	86-394

### CAT 6 RJ-45 Modular Plugs



- Unique three-piece design provides easy installation and optimal performance
- Crimps with a standard RJ-45 crimp die
- 50 micron gold contacts, 8-position, 8-contact
- Suitable for solid or stranded conductors – 0.26mm<sup>2</sup> - 0.33mm<sup>2</sup>

Description	Qty.	Cat. No.
CAT 6 RJ-45 Modular Plugs	25	85-366

### OmniSeal™ Pro Compression Tools

The IDEAL OmniSeal™ Compression Tools now offer additional features and increased connector compatibility in a smaller, more compact tool designed to meet the demands of the professional installer. (OmniSeal™ requires no accessory attachment to terminate IDEAL branded compression connectors.) Most other manufacturers compression connectors can be terminated with an easy plunger depth adjustment. The simple intuitive design combined with its size and universal connector acceptance makes this the only compression tool needed by professional installers.



- Factory preset to work with IDEAL compression connectors
- Compresses F-type, RCA, BNC and Mini connectors
- Adjustable to fit other manufacturer's connectors - no accessory adaptors required

Description	Qty.	Cat. No.
OmniSeal™ Pro XL Compression Tool		30-793
OmniSeal™ Pro Compression Tool		30-603

#### OmniSeal™ Pro XL



#### OmniSeal™ Pro



	BNC	F-Type	RG11	RCA	Mini Coax
OmniSeal™ Pro XL 30-793	yes	yes	yes	yes	yes
OmniSeal™ Pro 30-603	-	yes	yes	yes	yes

## Connectors and Termination Products

### COMPRESSION CONNECTORS

#### RTQ™ Reg/Tri/Quad & Plenum F-Connectors

- Fits 60% regular, tri-shield and quad shield cables
- Nickel-plated, brass-construction for superior corrosion resistance
- Designed for use by satellite and cable TV companies
- Weatherproof for indoor and outdoor use
- Use 30-603, 30-793 or 30-633 Compression Tools



#### RG-11 F-Connectors

- Fits 60% regular RG-11 cable
- Nickel-plated, brass-construction for superior corrosion resistance
- Designed for use by satellite and cable TV companies
- Weatherproof for indoor and outdoor use
- Use 30-603 or 30-793 Compression Tools
- Use 45-111, 6.35mm x 6.35mm RG-11 Coax Stripper



#### BNC Connectors

- Nickel-plated, brass-construction for superior corrosion resistance
- Moisture-inhibiting design
- Use 30-793 Compression Tool
- 75 Ohm nominal impedance
- Gold-plated pin contact area
- Available in plenum versions



#### OmniCONN™ F-Connectors

- Non corrosive nickel plated brass body and polycarbonate bushing
- Delrin/Nylon adaptor sleeve and o-ring provide double protection for a watertight seal
- Free spinning hex nut for ease of installation onto all 11.11mm ports
- 75 ohm nominal impedance



#### RCA Connectors

- Constructed of nickel plated brass and gold plated head
- 75 ohm nominal impedance
- Bandwidth up to 3 GHz
- Compatible with 30-603 and 30-793 Compression Tools
- Two-piece pre-assembled connectors





	Connector Type	Cable Type	Qty.	Cat. No.
	F	RG-6 Reg/Tri/Quad	Card of 4	92-654
			Card of 10	92-651
			Jar of 50	92-650
			Jar of 100	92-656
			Box of 1,000 (20 bags of 50 ea.)	92-759
			Box of 1,000 bulk	92-659
	F	RG-6 Plenum	Jar of 50	92-660
			Box of 1,000	92-669
	F	RG-59 Reg/Tri/Quad	Jar of 50	92-610
			Box of 1,000	92-619
	F	RG-11	Card of 10	89-211
			Box of 500	89-1211
	F	RG-6	Jar of 50	89-044
			Box of 1,500	89-1544
	F	Quad	Jar of 50	89-045
			Box of 1,500	89-1545
	BNC	RG-6	Card of 4	92-705
			Card of 15	89-048
			Jar of 35	89-5048
			Box of 1,000 (10 bags, 100 ea.)	89-1048
	BNC	RG-6 Plenum	Card of 15	89-050
			Jar of 35	89-5050
			Box of 1,000 (10 bags, 100 ea.)	89-1050
	BNC	RG-59	Card of 4	92-704
			Card of 15	89-047
			Jar of 35	89-5047
			Box of 1,000 (10 bags, 100 ea.)	89-1047
	BNC	RG-59 Plenum	Card of 15	89-049
			Jar of 35	89-5049
			Box of 1,000 (10 bags, 100 ea.)	89-1049
	RCA	RG-6	Card of 4	92-582
			Card of 10	89-582
			Jar of 35	89-580
	RCA	RG-59	Card of 4	92-572
			Card of 10	89-572
			Jar of 35	89-570
	RCA	Mini (21 - 23 AWG)	Card of 10	89-014SMRCA

## Connectors and Termination Products

### Compression Port Seals - 1/2 in.



- Used with compression F-connectors to weatherproof connector by placing onto the female port. Made from EPDM for superior sealing.

Description	Qty.	Cat. No.
Long Sleeve Compression F-Connector Port Seals, 12.7mm	Bag of 100	33-633

### Crimpmaster™ Crimp Tool Replacement Die Sets

- Used with compression F-connectors to weatherproof connector by placing onto the female port. Made from EPDM for superior sealing.

Crimpmaster™ Crimp Tool Frame  
Cat.No. **35-185**

Dies change quickly and easily with a screwdriver. Interchangeable dies provide versatility in a single tool.

Pressure adjustment for actuation force.



Crimp release provides operator safety.

Ratchet crimp action provides repeatable and reliable terminations.

Description	Tool Cat. No.	Replacement Die Set Cat. No.
22-10 AWG (0.5mm <sup>2</sup> - 6.0mm <sup>2</sup> ) fully insulated slide-on connectors	-	30-594
Insulated Terminal Crimp Tool with built-in locator	30-479	-
22-12 AWG (0.5mm <sup>2</sup> - 4.0mm <sup>2</sup> ) Non-insulated open barrel crimp style connectors	-	30-586
RG-58, 59, 62 Non-plenum Cambridge BNC/TNC connectors	30-481	30-573
RG-8/11, RG-213, RG-216 Ethernet Thickwire, N-Series type plugs and jacks	30-482	30-577
RG-9, Belden® 8281® and RG-6 Cable, 50 & 75 Ohm	30-483	30-578
RG-58 and RG-174 cable for 50 and 75 Ohm cables	-	30-587
RG-174 Mini-59 Hex BNC/TNC coax connector	30-485	30-576
RG-58 and RG-59 Plenum cables, Thinwire PVC Hex	-	30-591
16-26 AWG (0.13mm <sup>2</sup> - 1.3mm <sup>2</sup> ) Miniature insulated rings and splices	-	30-572
22-10 AWG (0.5mm <sup>2</sup> - 6.0mm <sup>2</sup> ) Insulated ring tongue terminals and splices	30-500	30-579
22-8 AWG (0.5mm <sup>2</sup> - 8mm <sup>2</sup> ) Non-insulated terminals and splices	-	30-580
RG-58 RG-59/62AU BNC/TNC3-Piece Hex type connectors	30-502	30-581
CATV RG-59 and RG-6 Captive Ring F-connectors	30-503	30-582
RG-6, RG-174, Belden-Type RG-8281 cables	-	30-570
Mini UHF and BNC/TNC 5 cavity	-	30-593
30-18 AWG (0.05mm <sup>2</sup> - 1.0mm <sup>2</sup> ), Open barrel pins and sockets	-	30-599



**30-556**

RJ-11 Crimp Tool for two, four or six-position modular plugs  
Tool w/die N/A



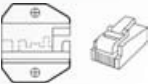
**30-559**

RJ-45 Eight-position Crimp Tool for keyed or non-keyed modular plugs  
Tool w/die 30-522



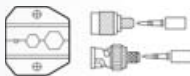
**30-560**

RJ-45 Eight-position Crimp Tool for AMP RJ-45 modular plugs  
Tool w/die 30-521



**30-570**

RG-6, RG-174, Belden-Type RG-8281 cables (Hex. 0.324 (8.23mm), 0.178 (4.52mm), 0.068 (1.73mm)  
Tool w/die N/A



**30-573**

Cambridge CP-88, CP-89 BNC/TNC coax connectors with RG-58, RG-59/RG-62 AU cables (Hex 0.305 (7.75mm), 0.068 (1.73mm), 0.228 (5.79mm)  
Tool w/die 30-481



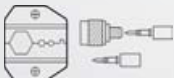
**30-576**

RG-174, Mini 59 BNC/TNC Connectors (Hex, 0.178 (4.52mm), 0.128 (3.25mm), 0.068 (1.73mm)  
Tool w/die 30-485



**30-577**

N-Series and RG-8/11 Connectors (Hex, 0.429 (10.90mm), 0.100 (2.54mm), 0.080 (2.03mm)  
Tool w/die 30-482



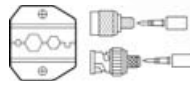
**30-578**

RG-59, RG-6, and 8281 50 and 75 OHM cables (Hex, 0.324 (8.23mm), 0.255 (6.48mm), 0.068 (1.73mm), 0.042 (1.07mm)  
Tool w/die 30-483



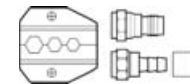
**30-581**

RG-58, RG-59/62, BNC/TNC Coax Connectors (Hex, 0.255 (6.48mm), 0.213 (5.41mm), 0.068 (1.73mm)  
Tool w/die 30-502



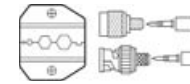
**30-582**

F-type CATV RG-59, RG-6 Connectors (Hex, 0.350 (8.89mm), 0.320 (8.13mm), 0.255 (6.48mm)  
Tool w/die 30-503



**30-587**

RG-58, RG-174 and G-8218 for both 50 and 75 ohm cables (Hex 0.213 (5.41mm), 0.178 (4.52mm), 0.068 (1.73mm), 0.042 (1.07mm)  
Tool w/die N/A



**30-591**

Plenum and Non-Plenum Thinwire Cables RG-58 and 59 (Hex, 0.213 (5.41mm), 0.190 (4.83mm), 0.068 (1.73mm), 0.042 (1.07mm)  
Tool w/die N/A



**30-593**

Mini UHF and BNC/TNC 5 cavity (Hex, 0.052 (1.32mm), 0.068 (1.73mm), 0.100 (2.54mm), 0.213 (5.41mm), 0.255 (6.48mm)  
Tool w/die N/A



**30-572**

16-26 AWG (0.13mm<sup>2</sup> - 1.3mm<sup>2</sup>) miniature insulated rings, spade and butt splices  
Tool w/die N/A



**30-579**

22-10 AWG (0.5mm<sup>2</sup> - 6.0mm<sup>2</sup>) insulated terminals/colour coded nests  
Tool w/die 30-500



**30-580**

22-8 AWG (0.5mm<sup>2</sup> - 8.0mm<sup>2</sup>) non-insulated terminals  
Tool w/die N/A



**30-586**

22-12 AWG (0.5mm<sup>2</sup> - 4.0mm<sup>2</sup>) Non Insulated Open Barrel Connectors, Commercial Type  
Tool w/die N/A



**30-594**

Fully Insulated quick disconnect terminals with thinner wire barrels 22-10 AWG (0.5mm<sup>2</sup> - 6.0mm<sup>2</sup>)  
Tool w/die N/A



**30-599**

30-18 AWG (0.05mm<sup>2</sup> - 1.0mm<sup>2</sup>) Open Barrel Pins and Sockets  
Tool w/die N/A



**30-479 (Tool w/die)**

For insulated terminals, 22-10 AWG (0.5mm<sup>2</sup> - 6.0mm<sup>2</sup>) with built-in locator





## Connectors and Termination Products

### F-Type Coaxial Connectors

F-Series Connectors utilize threaded couplings and cable conductors as contacts for CATV and other UHF applications.

- Available in the three most popular styles, RG-6/6Q/59
- All brass design
- One-piece body design
- Crimp with the Crimpmaster™ 30-503 Crimp Tool

	Connector Type	Cable Type	Termination Type	Qty.	Cat. No.
	F	RG-6	Crimp	Card of 4	84-017
				Card of 10	85-037
				Card of 50	85-017
				Box of 100	86-017
	F	RG-6 Quad	Crimp	Card of 4	84-030
				Card of 10	85-057
				Card of 50	85-030
	F	RG-59	Crimp	Box of 100	86-030
				Card of 4	84-016
				Card of 10	85-036
				Card of 50	85-016

### Push-On F-Connectors, RG-6 & RG-59

- No terminator tool required
- All brass nickel-plated construction
- Knurled nut for superior grip
- Designed for indoor use



Connector Type	Cable Type	Qty.	Cat. No.
F	RG-6	Card of 4	85-065
		Jar of 50	89-165
		Box of 1,500	85-1165
F	RG-6 Quad	Card of 4	85-066
		Jar of 50	85-166
		Box of 1,500	85-1166
F	RG-59	Card of 4	85-067
		Jar of 50	85-167
RCA	RG-6	Card of 10	89-500

### Twist-On F-Connectors, RG-6 & RG-59

- After cable is stripped, simply twist on connector
- No termination tool required
- Available in two styles, RG-6 and 59



Connector Type	Cable Type	Qty.	Cat. No.
F	RG-6	Card of 10	85-053
		Card of 50	85-039
		Box of 100	86-039
F	RG-59	Card of 4	84-018
		Card of 10	85-035

### F-Type Adaptors & Terminators

- Nickel-plated brass construction
- For 75Ω applications


	Description	Qty.	Cat. No.
	1GHz Female-to-Female F-Type Coaxial Adaptor	Card of 10	85-031
	3GHz F-Splice Adaptor, high bandwidth, 0MHz to 3GHz for standard and high definition applications, <0.25dB insertion loss, >25dB return loss	Card of 4	85-339
	Female to RCA Male Adaptor – converts female F-connectors to male RCA connectors	Card of 2	85-936
	Coax Cable F-Terminators - for all open ports on coax wall plates and splitters	Card of 10	85-038
	90° F-Adaptor - F-female to F-male coax adaptor	Card of 2	85-070



## BNC Connectors

- Connector construction covers both plenum and non-plenum cable jackets
- Captive gold centre contacts provide maximum conductivity and minimal resistance
- Nickel plating resists corrosion, tarnish and ensures signal quality
- Meets military specifications. MS39012 and MIL202 where applicable.
- Available in both small and bulk quantities to suit a range of application requirements

	Connector Type	Cable Type	Centre	Jacket	Connector Impedance	Insulation	Qty.	Cat. No.
	BNC Plug	RG-59	20 AWG Solid (0.5mm <sup>2</sup> )	Non-Plenum	75 Ohm	Delrin	Bag of 5 Box of 100	85-502 86-502
	BNC Plug	RG-6	18 AWG Solid (1.0mm <sup>2</sup> )	Non-Plenum	75 Ohm	Delrin	Bag of 5	85-512
	BNC Adaptor	-	Jack to Jack	-	50 Ohm	Delrin	Bag of 5 Bag of 5	85-545 85-590
	BNC Twist-on Plug	RG-59	22-23 AWG Solid (0.25-0.32mm <sup>2</sup> )	Non-Plenum	50 Ohm	Delrin	Bag of 5	85-480

	Description	Cat. No.
	F to BNC Adaptor Kit • 1x BNC Male to F-type Female • 4x F-type Male to BNC Female • 4x F-type Female to BNC Female • 1x RJ-45 Male to F-type Female	LA-4173

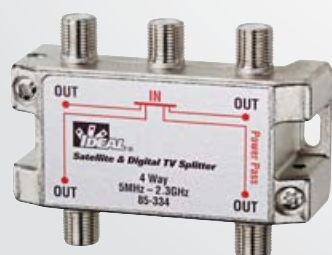
## Coax Connector Tool - F & BNC



- Works on compression and hex connectors
- Makes attaching (and detaching) connector to equipment easier
- Aids in installing CATV connectors on coax cable
- New comfort grip handle

Description Qty.	Cat. No.
Coax Connector Tool - F & BNC — 20.32cm overall (7.62mm. blade)	35-046

## 2.4 GHz Satellite and Digital TV Splitters

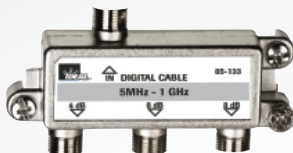


- Designed for easy mounting over cable
- All ports are F female connectors, 75Ω
- Two grounding screws eliminate the need for grounding block
- All ports power pass

Description	Cat. No.
2-Way, 5MHz - 2.4GHz	85-332
3-Way, 5MHz - 2.4GHz	85-333
4-Way, 5MHz - 2.4GHz	85-334

## Connectors and Termination Products

### Cable TV Splitters



Description	Qty.	Cat. No.
High Performance Cable Splitter, 5MHz-1GHz 2-Way	Card of 1	85-132
	Box of 10	86-132
High Performance Cable Splitter, 5MHz-1GHz 3-Way	Card of 1	85-133
	Box of 10	86-133
High Performance Cable Splitter, 5MHz-1GHz 4-Way	Card of 1	85-134
	Box of 10	86-134

### 8-Way Digital Cable Splitter



- Nickel-plated housing
- High-performance impedance balanced Printed Circuit Board design
- Bandwidth: 5MHz - 1 GHz Impedance: 75 Ohm
- Over 120 dB of RFI shielding
- Low insertion loss
- Splits signals up to 8 outlets
- Terminators (85-038) needed for all unused ports for optimal performance

Description	Qty.	Cat. No.
Digital Cable Splitter, 8-Way		85-138

### Diplexer 5 MHz - 2.1 GHz



- Combine or split cable/antenna signals with satellite signals
- High quality PCB design
- Corrosion-resistant sealed construction
- Nickel-plated die-cast zinc housing
- Grounding hole for up to 6 AWG wire

Description	Qty.	Cat. No.
Diplexer, 2.1 GHz, SATV/TV Combiner Splitter - 2 Amp		85-323

### Grounding Block



- Solid zinc alloy, nickel plated and chromate finished
- High performance 360° beryllium copper contact
- Excellent electrical performance 0 - 3,000 MHz
- UL/CSA approved

Description	Qty.	Cat. No.
2-Port Grounding Block for F-Connectors		85-311



## Connectors and Termination Products

### Compression Connector Installation Kit



Description	Qty.	Cat. No.
Compression Connector Installation Kit	1	33-623
Data T <sup>®</sup> -Cutter	1	45-074
Coax Cable Stripper	1	45-320
Economy Compression Tool	1	30-633
Pouch w/belt clip	1	-

### RG-6 Push-on Connector Kit



Description	Qty.	Cat. No.
RG-6 Push-On Connector Kit	1	33-320
RG-6 Push-On Connectors	4	85-065
2-Step 59 & 6 Series Stripper	1	45-320

### BNC/TNC & F-Series Connector Removal Tools



- BNC/TNC connector removal tools for easy access to high density locations of connectors.

Description	Cat. No.
12 in. (30.5 cm) Overall Length, 8 in. (20.3 cm) Blade Length	35-042
16 in. (40.6 cm) Overall Length, 12 in. (30.4 cm) Blade Length	35-043

### Coax Strip and Crimp Tool



(Kit includes ten connectors)

- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Cat. No.
Coax Strip & Crimp Tool	30-433
Coax Strip & Crimp Tool Kit w/ten RG-6 F-Connectors	30-433F

## **FIBRE TOOLS AND ACCESSORIES**

### **Simplex/Duplex 3mm jacket Stripper**



- Designed to remove the jacket from 3mm Simplex or Duplex (zip cord) fibre optic cable
- Form-ground, knife-type blades for accurate easy stripping without damaging the fibre or Kevlar® strength member
- Contoured, comfort-grip handles to reduce operator fatigue

Description	Cat. No
Simplex/Duplex 3mm Jacket Stripper	45-349

### **Stripmaster® Ribbon Fibre Jacket Stripper**



- Removes jacket from Ribbon Fibre without damage to the Kevlar® strength member of the Ribbon Fibre
- Note: Frame and blade-set sold separately.

Description	Cat. No
Stripmaster® Frame only	L-5620
Frame & Blade-set for use with Corning Plenum and Riser Ribbon Fibre Cable	45-891
Frame & Blade-set for use with Corning "Fanout" Ribbon Cable	45-892

### **Serrated Cutter (for Kevlar®) with Breaker Notch**



- Two-Step process significantly increases the life of this rugged tool
- Superior quality high-carbon stainless steel with molybdenum and vanadium provides the super-hard edges needed to stand up to the demands of today's market
- Textured cushioned-grip handles
- Value-priced for contractors, cable assembly houses, fibre installers/technicians and tool kits

Description	Cat. No
Serrated Cutter w/Breaker Notch	45-344

### **MiniLite-Strip™ Optical Fibre Stripper**

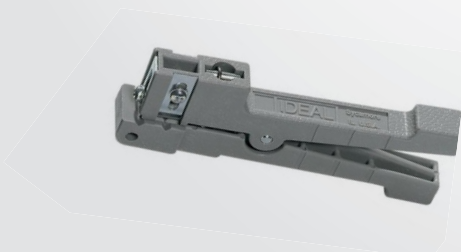


- Small strip notch engineered and precision-ground to strip 900 micron or 250 micron buffer coatings from
- 125 micron fibre
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary

Description	Cat. No
MiniLite-Strip™ Optical Fibre Stripper	45-352

### **Cable Strippers**

This lightweight, compact stripper is inexpensive and simple to operate.



- Adjustable blades can be set for any depth to help ensure nick-free strips
- Use with twisted-pair wire, tightly wrapped stranded cables, CATV cable, CB antenna cable, SO, SJ, SJT and other types of flexible power cords
- Includes three straight and one round blade

Description	Cat. No
Cable Stripper, up to 1/8 in. (3.2 mm) O.D., Gray	45-162-341
Cable Stripper, 1/8 in. (3.2 mm) to 7/32 in. (5.556 mm) O.D., Blue	45-163-341
Replacement Blade Set for 45-162, 45-163, 45-165	L-9225



## Fibre Tools and Accessories

### Split-Tip Fibre Optic Swabs



- Split-tip design cleans fibre easier and more efficiently than other methods
- Tube/handle is pre-loaded with 99% isopropyl alcohol
- A single swab can be used for many cleanings or until the alcohol is gone

Description	Qty.	Cat. No.
Split-Tip Fibre Optic Swabs	Bag of 20	45-360

### DualScribe™ Double-Ended Fibre Optic Scribes



- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- Colour-coded handles for quick, easy identification
- Red – Ruby
- Blue – Sapphire
- Black – Carbide
- 30° single bevel – DualScribe™ reversible blade doubles tool life
- Soft non-slip grip provides precise control during scribing
- Clear safety cap protects the blades from damage when not in use

Description	Handle Colour	Cat. No.
Ruby Blade Fibre Optic Scribe	Red	45-357
Sapphire Blade Fibre Optic Scribe	Blue	45-358
Carbide Blade Fibre Optic Scribe	Black	45-359

### Plastic Polishing Fixture



- Universal fitting accepts all ST®, SC and FC connectors with 2.5mm ferrules
- Economically priced
- Grooved face for polishing efficiency
- Precision tool used by manufacturers, contractors and in tool kits

Description	Cat. No.
Plastic Polishing Fixture	45-342

### Stainless Steel Polishing Fixture for Optical Fibre ST® and SC Type Connectors

F-Series Connectors utilize threaded couplings and cable conductors as contacts for CATV and other UHF applications.



- Precision-machined, stainless-steel disk provides accurate polishing angle for desired end face finish
- Stainless-steel hardness maintains long life and resists uneven wear
- Stepped surface reduces drag and friction for easier polishing

Description	Handle Colour	Cat. No.
Polishing Fixture for Optical Fibre SC/ST® Type Connectors	1	45-341

### Polishing Films for Fibre Optic Connectors



- For optimum connector polishing results, we recommend a three-step procedure using 0.5µm, 3µm and 12µm 3" x 6" aluminum oxide polishing films
- Lot-to-lot consistency in our films means repeatable connector finishes on ceramic, stainless steel, plastic and composite ferrules
- A single sheet will typically yield 10 to 20 connectors when using the recommended 3-step procedure

Description	Colour	Qty.	Cat. No.
0.5µm, 3" x 6", Aluminum Oxide	Ivory	20 films/sleeve	45-337
3.0µm, 3" x 6", Aluminum Oxide	Lt. Yellow	20 films/sleeve	45-338
12µm, 3" x 6", Aluminum Oxide	Lt. Red	20 films/sleeve	45-339

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## ELECTRICAL



Domestic, commercial and industrial electricians have come to depend on IDEAL for quality electrical products. Our electrical line contains just about everything an electrician might need for an easier, more efficient job: industry standard wire connectors, fish tapes, wire pulling lubricants, wire strippers, hand tools, safety supplies and a comprehensive family of rugged, versatile and easy-to-use test and measurement instruments.

For more information on our electrical range please visit

[www.idealindustries.co.uk](http://www.idealindustries.co.uk)

### Recommended product for data centres

#### HeatSeeker® Thermal Imagers

Troubleshoot and identify potential problems before they happen with the IDEAL HeatSeeker® Thermal Imagers. What makes HeatSeeker® so useful are the dual cursors that instantly locate the hottest and coldest temperatures on a live screen, and the camera's ability to blend a thermal image on top of a digital image for easy on-the-job decision making. The HeatSeeker® Thermal Imager's easy set-up and operation make it a cost-effective tool for electrical service, industrial maintenance, building inspection and data centre evaluation



#### Features and Benefits

- Troubleshoot potential problems quickly
- Auto hot/cold tracker
- Image blending of thermal and digital
- Picture-in-picture
- Large widescreen display
- Mark images with text and voice annotation
- Sequence image recording

Description	Cat.No
HeatSeeker	61-844EU
HeatSeeker® 160	61-846EU

### For more information about IDEAL INDUSTRIES NETWORKS in Europe:

#### IDEAL INDUSTRIES NETWORKS DIVISION

Unit 3, Europa Court, Europa Boulevard,  
Westbrook, Warrington, Cheshire, WA5 7TN,  
United Kingdom  
Tel: +44 (0)1925 444446  
Fax: +44 (0)1925 445501  
Email: [uksales@idealnwd.com](mailto:uksales@idealnwd.com)  
[www.idealnwd.co.uk](http://www.idealnwd.co.uk)

#### IDEAL INDUSTRIES GmbH

Gutenbergstrasse 10,  
D - 85737 Ismaning, Germany  
Tel: +49 (0) 89 99686 0  
Fax: +49 (0) 89 99686 111  
Email: [germanysales@idealnwd.com](mailto:germanysales@idealnwd.com)  
[www.idealnwd.de](http://www.idealnwd.de)

#### IDEAL INDUSTRIES SAS

Route de Gisy, ZA Burospace - Bât 7, F - 91571  
BIEVRES CEDEX, France  
Tel: +33 (0)1 69 35 54 70  
Fax: +33 (0)1 60 19 00 48  
Email: [francesales@idealnwd.com](mailto:francesales@idealnwd.com)  
[www.idealnwd.fr](http://www.idealnwd.fr)



**IDEAL INDUSTRIES LIMITED**

Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington,  
Cheshire, WA5 7TN, United Kingdom

Tel: +44 (0)1925 444446, Fax: +44 (0)1925 445501, Email: [uksales@idealnwd.com](mailto:uksales@idealnwd.com)

**International offices:**

Australia • Brazil • Canada • China • France • Germany • Mexico • UK • USA

For complete sales office contact information, visit us at [www.idealindustries.co.uk](http://www.idealindustries.co.uk).

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