

Analog Multimeters



310C Volt-Ohm-Meter

Analog Multimeters

The model 310 series is the favorite hand-held analog volt-ohm-meter in the maintenance and telecommunications field.

These analog meters include a polarity reversing switch.

Triplet

Item No.	EMBARQ Item No.	Mfg. Part No.	Description	Ranges	Voltage Ranges	Resistance Ranges	Ohm Ranges
5504050181	550405	3022	Analog Model 310-C VOM	18	5 DC & 5 AC	4	
5504060181	550406	3018	Analog Model 310 VOM	18	5 DC & 5 AC	4	
5514930181	551493	3067	Analog 310 Model 3067 VOM	16	4 DC & 4 AC		4
5505060181	550506	10-1791	Leather Case for 310 Multimeter				



Model 60 Series

Analog Multimeters

The model 60 series are drop resistant, overload protected volt-ohm-meters for demanding field use. They are guaranteed to withstand a 5-foot drop on all ranges by our unique 3-fuse arrangement.

The Triplet 3145 includes a mirrored scale and polarity reversing switch.

Triplet

Item No.	EMBARQ Item No.	Mfg. Part No.	Description	Ranges	Voltage Ranges	Current Ranges	Resistance Ranges	Decibel Ranges
5503720181	550372	3145	Analog Model 60 VOM Type 5	28	8 DC & 6 AC	4 DC	5	5

Analog Multimeters



Model 630 Series

Analog Multimeters

The model 630 series is the industry standard for laboratory, bench and field testing.

- Single range switch to help reduce chance of operator error
- Diode overload protection and 2 fuse arrangement
- Mirrored scale to reduce parallax error
- Decibel function for audio work
- All ranges are fuse protected

Triplett

Item No.	EMBARQ Item No.	Mfg. Part No.	Description	Ranges	Voltage Ranges	Current Ranges	Resistance Ranges	Decibel Ranges
5515190181	551519	3030	Analog Model 630 VOM	25	6 DC & 5 AC	4 DC	5	5

Digital Meters



True RMS 6000 Count Digital Multi Meter

Digital Multimeters

True RMS 6000 Count display Digital Multi Meter.

- Features 61 segment bargraph
- Blue backlit LCD
- Auto/Manual ranging
- DC voltage ranges to 1000V and AC voltage ranges to 750V
- AC/DC current ranges to 10A
- Resistance ranges to 60M
- Temperature test fahrenheit and celsius selectable
- Flexible auto power off
- Includes safety test leads with screw-on alligator clips
- Thermocouple probe and 9 volt battery
- 3 year warranty

Triplett

Item No.	Mfg. Part No.	Description
0000151165	9045	True RMS 6000 Count Digital Multi Meter

Digital Meters



187 Digital Multimeter

Digital Multimeters

The 187 is a handheld digital multimeter with true RMS and 1-kHz bandwidth. It also includes a TL71 lead, 0.025% DC accuracy and 1 microvolt resolution for bench meter performance.

This tool is used to find temperature, capacitance, dB, frequency, pulse width and duty cycle problems. It includes a light, bright white display with a dual parameter read out. Complex maintenance and design problems are solved with the advanced functions and accuracy levels.

Fluke Electronics

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
3080240764	308024	Fluke-187	187 Digital Multimeter



189 Digital Multimeter

Digital Multimeters

The 189 handheld logging digital multimeter includes a TL71 lead, AC70 clip, true RMS and 1-kHz bandwidth.

It will troubleshoot power distribution, industrial automation, process controls, electronic and electro-mechanical equipment in the field and bench. It has a built-in data logger to record measurements unattended without a PC.

Fluke Electronics

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5348840764	534884	Fluke-189	189 Digital Multimeter



177 and 179 Multimeter

Digital Multimeters

The 170 series has the features needed to find most electrical, electronic, electro-mechanical, heating and ventilation problems. They include a wide 1000 volt measurement range with capacitance, resistance, continuity, and frequency testing.

The 177 and 179 testers provides true-RMS, AC voltage and current for accurate measurement loads. It has a large digital display with analog bargraph and display backlight for work in dark areas.

The 179 includes a built-in temperature probe.

Fluke Electronics

Item No.	Mfg. Part No.	Description
0000003513	Fluke-177	177 Multimeter
5371310764	Fluke-179	179 Digital Multimeter with Built-in Thermometer



Telco and Transmission Testers



Model 200 P

Transmission and Cable Test

The 200P offers a wide range of testing functions for both analog and digital facilities.

- Simultaneous send/receive testing from 20 Hz to 11 kHz
- All basic analog tests for voice, data or broadcast transmissions
- 4 screens for ease of use
- Dial and hold capability
- Battery powered-AC rechargeable

Independent Technologies/Metrotel Corp.

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0166950089	016695	7200-1600	200P Wideband Transmission Measurement Test Set



Sidekick T&N

Transmission and Cable Test

The Sidekick T&N combines the functions of the Sidekick 7B plus the features of transmission and noise testing, loop current testing, circuit loss testing, metallic noise testing, power influence testing and load coil detection.

Greenlee (Tempo)

Item No.	Mfg. Part No.	Description
5194848211	1137-5002	Sidekick T&N Transmission and Noise Tester



3230 Noise Mitigation Test Set

Telco Tester

The 3230 noise mitigation test set is a portable, weather-resistant, noise mitigator test set.

It excels at measuring noise caused by excessive radiated harmonics. All data analysis is accomplished internally and does not require PC support. The user-friendly mitigator is menu driven and has a help key for on-line assistance.

- "Green window" test
- Data logging
- Analysis mode
- Peak finder

Triplet

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0238310181	023831	3230	Noise Mitigation Test Set

Telco and Transmission Testers



Model 5 Digital Subscriber Loop Test Set

Telco Tester

The 3060 is a transmission test set with a 17-frequency multi-tone generator and a multi-range volt-ohm-meter in a rugged portable unit.

The model 5 was engineered with use in mind, with superior resistance to shock and extreme temperatures.

It comes with a molded, high impact thermoplastic case and cover with a non-slip finger tread surface and an adjustable nylon shoulder strap.

- 3.5 digit LCD readout
- DC and AC volt-ohm-meter
- True RMS detector
- Lid switch shut-off
- Bridged or terminated input at 600 or 900 ohms

Triplet

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5510240181	551024	3060	Model 5 Digital Subscriber Loop Test Set



Fox 2 and Hound 3 Probe Kit

Telco Tester

Fox 2 and hound 3 probe kit- includes:

- Fox 2 deluxe tone generator
- Hound 3 probe inductive tracer
- Cordura carrying case

Triplet

Item No.	Mfg. Part No.	Description
0000185466	3399	Fox 2 and Hound 3 Probe Kit



T304B/T305 Bond Current Meter/Probe

Bond Current Meter/Probe

The T304B/T305 bond current meter/probe is a light weight rugged, easy to use test set that is designed to measure alternating currents from 10 ma to 100 A. When used with either a T305 or T272A Current Probe, the T304B will measure cable shield currents with out disrupting or disconnecting cable shield connections. The T304B's bond checking feature allows immediate on-site bond condition assessments to be made. The T304B features seven position switch current ranges of 100mA, 300mA, 1A,3A,10A, 30A and 100A.

Wilcom

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5516350256	551635	T304B	Current Meter and Cable Bond Test Set
5516570256	551657	T305	Current Probe



Linemans Test Sets



PT-311

Linemans Test Set

The PREMIER PT-311 test set is built tough for use by repair technicians and installers. This durable, test set features an audible ringer, last number redial up to 31 digits, and full featured alligator clips with bed-of-nails, angled nose, and piercing pin.

- Mute and Polarity button
- Hearing aid compatible
- Water resistant

PREMIER

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5518827521	551882	PT-311	Premier Test Set with Alligator Clip and Angled Bed-of-Nails Cord
5515237521	551523	PT-11286	Replacement Test Cord with Alligator Clip and Angled Bed-of-Nails, 5-Feet



TS44 44801

TS44 Deluxe Speakerphone Test Set with Data Override

Accidentally clipping onto the wrong pair in a wiring closet or cross-box is the biggest threat to data lines and can interrupt critical data traffic. The TS44 DLX test set is equipped with new DataSafe Pro data protection technology featuring superior high-impedance monitoring, data lockout and lockout override making you completely safe in talk, monitor or override mode.

- Speaker
- Data override
- Water proof

PREMIER

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000048177	044192	44801-009	TS44 Deluxe Speakerphone Test Set with Angled Bed-of-Nails Cord, Data Lockout and Data Lockout Override
0000048386	044194	44801-004	TS44 Deluxe Speakerphone Test Set with 346A CO Plug Cord and Data Lockout Override

Linemans Test Accessories

PREMIER

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000056954	062384	P4080-248	Locking Belt Clip for Model TS44 Test Sets
0000056955	062385	P4080-249	Standard Belt Clip for Model TS44 Test Sets
0000056956	062386	P4480-004	Replacement Cord for Model TS44 Deluxe 346A CO Plug Test Set
0000056957	062387	P4480-009	Replacement Cord for Model TS44 Deluxe Angled Bed-of-Nails Test Set

Linemans Test Sets



TS22A Test Set

Linemans Test Sets

These test sets are for POTS testing on analog or high-frequency digital lines. Features include a 2-way speakerphone, piercing pin cord, angled bed-of-nails cord, high impedance for DataSafe operation in monitor mode and RainSafe™ protection against unfavorable field conditions.

- 3 audio levels
- Electret microphone
- Audible electronic ringer
- Tone/pulse
- Redial
- 2 polarity LEDs
- Moisture resistant

Fluke Networks

Item No.	Mfg. Part No.	Description
5519010429	22801-001	Test Set with 2-Way Speaker Phone with Piercing Pin Clip
5517810429	22801-009	Test Set with 2-Way Speaker Phone with Bed-of-Nails Cord

Linemans Test Sets

The TS®22 series provides POTS testing on analog or high-frequency lines. The 22800-001 and 22800-009 include an amplified speaker and RainSafe protection against unfavorable field conditions.

Fluke Networks

Item No.	Mfg. Part No.	Description
5514940429	22800-001	TS22 Test Set with Amplified Speaker with Standard Cord
5514990429	22800-009	TS22 Test Set with Amplified Speaker with Bed-of-Nails Cord
5515340429	P3218-234	Line Cord TS21/22, with Angled Bed-of-Nails



TS30 Test Set

Linemans Test Sets

Fluke Networks' TS30 Test Set features the latest in test set case design, at an affordable price. The ergonomic non-slip grip handle provides improved handling of the set in all weather conditions. Includes DataSafe® operation so technicians can clip onto a line in Monitor mode, without disrupting existing data traffic.

- High impedance DataSafe™ operation in Monitor mode
- DropSafe™ reliability passes 20 foot drop test
- RainSafe™ protection in severe weather conditions
- Mute switch
- Last number redial

Fluke Networks

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5531630429	533163	30800009	TS30 Test Set with ABN

Linemans Test Sets



LB220

Linemans Test Sets

The LB220 and LB230 telephone test sets includes an LCD readout and volt-ohm-meter.

- Five number memory
- Last number redial for 19 digits
- Technical support number programmed into memory dial
- Amplified line monitor for volume levels comparable to "off hook" operation
- Tone and pulse dialing and microphone mute
- Headset for hands-free use

Test-Um Inc.

Item No.	Mfg. Part No.	Description
3098558114	LB220	Lil' Buttie Pro Test Set with Bed-of-Nails Cord set, Mini Headset, and two-piece belt clip
3098568114	LB230	Lil' Buttie Pro Test Set with Bed-of-Nails Cord set, and AT&T Snap Clip and Mini Headset



LB255

Linemans Test Set

The LB255 is a DSL safe linemans test set.

- DigiView™ DTMP decode to see the digits as a dial-out
- Incorporates a built-in amplified speaker
- ADLI™ auto dial line identification for inbound and outbound line identification with caller ID testing
- Headset for hands-free use
- Auto power-off eliminates dead batteries
- Senses digital lines and identifies under and over voltage conditions
- Amplified speaker with 3 volume levels

Test-Um Inc.

Item No.	Mfg. Part No.	Description
0000012700	LB255	Ranger - DSL-Safe Test Set LB255 with ADLI, Bed-Of-Nails Cord Set, Mini-Headset and Nylon Pouch

Ground Resistance Testers



DET5/4R Four Terminal Ground Tester

Ground Test Equipment

The DET5/4R is a fully automatic four terminal ground tester built into a rugged, water resistant case giving protection for outdoor use.

- Autoranging from 10mΩ to 20 kΩ
- High tolerance to spike resistance in urban areas
- Noise rejection to 40V
- Tests to BS7671, BS7430, BS6651 and VDE0413
- Simple, fully automatic operation

Megger

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0390270607	039027	DET5/4R	DET5/4R Four Terminal Ground Tester



DET2/2 Ground Resistance Tester

Ground Resistance Test Equipment

The DET2/2 incorporates a simple and fully automatic operation.

- Resistance range from 0.010Ω to 19.99 kilohms
- Accurately measures ground resistance under the most demanding conditions
- High Sensitivity
- High resolution - 0.001 Ohms with autoranging

Megger

Item No.	Mfg. Part No.	Description
0000053759	DET2/2 250202	DET2/2 Ground Resistance Tester

Gas Detectors

Gas Detector



PELCHEK-MAX414

This portable multi-gas monitor is used to detect and display up to four gasses simultaneously. The gases detected are oxygen, methane, carbon monoxide, and hydrogen sulfide. It includes a pump and data logging charger with adapter.



PELCHEK-ENF Enforcer Calibration Unit

The PELCHEK-ENF is a 34 liter, 4 gas calibration mixture used with the PELCHEK-MAX414 and fits into the Enforcer.

PELCHEK-FCHO is a replacement cartridge for the PELCHEK-MAX414 and includes O2, CO, H2s, LEL sensors.

PELCHEK-Cal1 is a 34 liter, 4 gas calibration mixture for the PELCHEK-MAX414.

Pelsue

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000069470	063232	PELCHEK-MAX414	PELCHEK-MAX414
0000069468	063233	PELCHEK-ENF	PELCHEK-ENF Enforcer Calibration Unit
0000069467	063234	PELCHEK-CAL1	PELCHEK-CAL1 4 Gas Calibration Mixture
0000069469	063235	PELCHEK-FCHO	PELCHEK-FCHO Replacement Cartridge

Location Devices



2273 Cable Locator/Sheath Fault Locator

Cable/Pipe Fault Locator

The 2273 series is a cable and sheath fault locator. Dynatel locators have several built-in features that allow you to perform cable locating with the utmost accuracy.

It is used to find the exact path and estimated depth of CATV and telephone cables or pipes with metallic tracer wires. The 2273 locators have four operator selectable frequencies, visual cable locates, and a direct readout of active duct probe.

- Both units have a direct connect cable for Telco and CATV applications
- The 2273- U3T3 identifies and measures points of cable damage
- The 2273-U5T3/A comes with extended DC power

3M Telecom Systems Division

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5193160216	519316	2273-U5T3/A	Cable/Sheath Fault Locator, Receiver, 5 Watt Transmitter, 3-Inch Inductive Coupler, Direct Connect Cable for Telco/CATV Applications
5521460216	552146	2273-U3T3	Advanced Cable/Sheath Fault Locator, Provides Toning of Aerial Cable, Identify and Measure Points of Cable Damage, 3 Watt Transmitter, 3-Inch Inductive Coupler

Location Devices



2273M Cable/Pipe/Fault Locator

Cable/Pipe Fault Locators

The ultra advanced 2273M series is a cable/pipe/fault locator. These locators feature the best in class, speed, sensitivity and accuracy.

The unique features include configuration tools tailored to the users need, user definable frequencies and screens. It provides the features of the 2250 series locators.

The 2273M-iD option enable users to read and write facility or user data for the new 1400 series iD markers.

- Includes 2273 receiver with EMS-iD locating capabilities
- M Series provides the deepest location features

3M Telecom Systems Division

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000046025	061835	2273M-ID/UC3W-RT	Ultra Advanced Cable/Pipe/Fault Locator, Includes 2273 Receiver with EMS-iD Locating Capabilities, 3 Watt Transmitter, 3-Inch Inductive Coupler
0000046393		2273M-UC5W/RT	Ultra Advanced Cable/Pipe/Fault Locator, Includes 2273 Receiver, 5 Watt Transmitter, 3-Inch Inductive Coupler
0000091039		2273M-ID/UC5W-RT	Ultra Advanced Cable/Pipe/Fault Locator, Includes 2273 Receiver, 5 Watt Transmitter, 3-Inch Inductive Coupler



Cable Locator 2250M

Cable/Pipe Fault Locators

The 2250M cable/pipe locators are microprocessor-based systems that incorporate advanced digital signal processing techniques. Traces the path of underground cables and pipes, both copper and fiber optic.

The 2250's are used to find the exact path and estimated depth of CATV and telephone cables or pipes with metallic tracer wires.

- The 2250M-CNTR/5W is a microprocessor-based system that incorporates advanced digital signaling

3M Telecom Systems Division

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5521960216	552196	2250-U3T3	Cable Locator, 3-Inch Coupler, 3 Watt Transmitter
0000124580		2250M-CNTR/5W	Cable/Pipe Locator, 6-Inch Coupler, 5 Watt Transmitter
0000124630		2200RB	Rechargeable Battery for 5 Watt Cable Locator Unit

Location Devices



Super Cable Hound

Cable/Pipe Fault Locators

The super cable hound features an easy-to-use tone probe with great flexibility. The portable receiver and tone probe are carried around the job site during the location procedure. The transmitter is provided with leads for connection to the cable or pipe under test and the grounding rod.

- Dual frequencies
- Long-range locating
- Easy to use
- Rugged and battery powered

Independent Technologies/Metrotel Corp.

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5347130089	534713	99-7117	Super Cable Hound



Cable Hound DSP Kit

Cable/Pipe Fault Locators

The Cable Hound Receiver® with DSP noise suppression uses state-of-the-art digital signal processing to filter out virtually all unwanted noise. It detects the 2.7 kHz signal produced by the Cable Hound transmitter.

- Auto-off switch on the transmitter and receiver improves battery life
- Quality padded headphones for use in noisy environments
- Kit includes: Transmitter, digital receiver, headphones, tone probe, ground rod and carrying case
- Improved depth and distance capabilities
- New receivers with digital signal processing (DSP)

Independent Technologies/Metrotel Corp.

Item No.	Mfg. Part No.	Description
0000118167	99-0118	Cable Hound DSP Kit

Tones and Probes



PRO3000 Tone And Probe Kit

Tones and Probes

The Pro3000 Tone and Probe Kit is the innovative analog tone and probe from Fluke Networks. Easily identify individual pairs with its patented SmartTone™ technology (the five different tones for exact pair identification). The large powerful speaker on the probe allows you to hear through drywall, wood or other enclosures to find wires quickly and easily. Kit includes pouch.

- Select solid or alternating tone options, indicated with solid or flashing LEDs
- Exclusive SmartTone™ technology can generate five separate analog tones when the pair is shorted at the far end
- Works on de-energized AC wire, telephone/twisted pair wire, all voice and data category rated cable, all coax cable, speaker wire and security wire
- Send tone signal up to 10 miles on most cables
- Line cord features Angled Bed-of-Nails clips and ruggedized RJ-11 plug for direct access to phone and data jacks without adapters

Fluke Networks

Item No.	Mfg. Part No.	Description
0000126906	26000900	PRO3000tm Analog Tone and Probe Kit

Voltage Detectors



C9970 Voltage Detector

Voltage Detector

The C9970 and C9973 detect AC and DC voltages through a long-life carbide tip and comes with a probe cap.

The C9973 voltage detector kit includes: voltage detector, probe cap, storage bag, temporary bond, ground cord, and handbook.

Fluke Networks

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5500471268	550047	C9970	C9970 Voltage Detector
5510611268	551061	C9973	C9973 Voltage Detector Kit



Foreign Voltage Detector • Foreign Voltage Detector with Leather Pouch

Voltage Detector

The FVD voltage detector tests for potentially hazardous AC voltage that may be encountered by communication technicians.

Telco Sales

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
4186444862	418644	FVD	Foreign Voltage Detector
4186654862	418665	FVD/FVDP	Foreign Voltage Detector with Leather Pouch
4186454862	418645	FVDP	Leather Pouch for Foreign Voltage Detector

Copper and DSL Testers



945DSP Subscriber Loop Tester

Copper and DSL Testers

The 945 series is a rugged and portable test set for harsh environments. The Dynatel™ 900 series test sets offer the right mix of functions from loop diagnostic routines, to fault locating, transmission testing and combination test/terminal capabilities.

3M Telecom Systems Division

Item No.	Mfg. Part No.	Description
0084970000	945DSP-L	Subscriber Loop Tester with Load Coil
0000082744	945DSP	Subscriber Loop Tester with C-Message Filter, Alligator Clips and Bed-of-Nail Leads



965DSP Subscriber Loop Tester

Copper and DSL Testers

The 965DSP series is rugged and portable for harsh environments. The Dynatel™ 900 series test sets offer the right mix of functions from loop diagnostic routines, to fault locating, transmission testing and combination test/terminal capabilities.

Some models also include spectrum analyzer and DSL testing capabilities.

The 965DSP-A/ADSL/BON is designed for pre-qualification and fault diagnosis of ADSL lines. Tests between the protector (customer premise) and the DSLAM. Includes active modem to measure and display upstream and downstream data rates, signal to noise ratio, transmit and receive power levels and error rates. It includes an Alcatel MTK-20150 ADSL modem chip.

3M Telecom Systems Division

Item No.	Mfg. Part No.	Description
5136200216	965DSP-A/TDR/WB	Subscriber Loop Tester with TDR
3084630216	965DSP/SA-BON	Subscriber Loop Tester with Spectrum Analyzer. Provides full-featured POTS, Wideband and DSL-Specific Testing
5376420216	965DSP/TDR/1343	Subscriber Loop Tester with TDR. Includes 1343 Far End Device II with Bed-of-Nails
5138120216	965DSP-B	Subscriber Loop Tester without TDR
0000060973	965DSP-A/ADSL/BON	Subscriber Loop Tester with ADSL
0000024422	965DSP-A/SA/ADSL/BON	Subscriber Loop Tester with Spectrum Analyzer and ADSL

Copper and DSL Testers



1342 Far End Device • 1343 Far End Device

965 DSP Testing Accessories

The Dynatel™ 900 series far end devices and accessories are used with the 965DSP test sets.

3M Telecom Systems Division

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5340390216	534039	1342	Far End Device II with Alligator Clips
5376430216	537643	1343	Far End Device II with BON Alligator Clips
0192610216	019261	1149	Adaptor, Alkaline Battery 900 AST
0192570216	019257	1143	Green Test Lead/Alligator Clip
5349510216	534951	1145	Adaptor 110/220 VAC
0000018813	065835	1151	Soft Carrying Case DSP/DSL
0192590216	019259	1147	Ground Strap
3059580216	305958	1146	Cigarette Lighter Adaptor
0192600216	019260	1148	Battery Pack for NMH
5521210216	552121	1134	Test Cable, Bed-of-Nails for 900-01



965AMS Advanced Modular System

Copper and DSL Testers

The new 965AMS advanced modular system contains every feature of our previous 965 model plus a larger, brighter display that features 3M™ Vikuiti™ Display Enhancement technology, a user-friendly icon-based interface and rugged field-swappable module.

The external modules can be shared between technicians and allows transmission testing of a variety of OSP technologies. The platform is available with an optional ADSL2+ modem module. Development for future modules may include such features as: VDSL2, FTTx fiber test, VoIP, DS1, DS3 and new technologies yet to come.

3M Telecom Systems Division

Item No.	Mfg. Part No.	Description
0000156752	965AMS-TDR-SA-ADSL2+/AC/DC/BON	Advantage Modular System with TDR/SA/ADSL2+/AC/DC/BON

Copper and DSL Testers

Copper and DSL Testers



990 DSL CopperPro Loop Tester

The 990 DSL CopperPro™ loop testers offers a broad range of POTS troubleshooting and qualifies POTS, digital and broadband services.



TN2100

The TN2100 is an accessory module to the 990 DSL CopperPro. You can optimize your workforce with “one tech out” terminated testing of out of service pairs.

- Fault location and line qualification capabilities
- Identifies and locates physical cable faults
- Finds the root causes of transmission problems
- Identifies loop treatment devices

Fluke Networks

Item No.	Mfg. Part No.	Description
0000000913	990DSL	CopperPro™ Loop Tester
0000108832	TN2100	Enhanced Copper Pro Terminator Far End Device



SunSet MTT Chassis with modules

Copper and DSL Testers

The SSMTT series is a handheld test set for access network installation, verification, and troubleshooting. The SunSet™ MTT offers a selection of over 30 test modules to fit applications ranging from fiber optics, metro, DSL, transport and service. The MTT family is comprised of various chassis configurations allowing you to match your testing needs.

Sunrise Telecommunications

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000083241	065011	SSMTT-ACM	SunSet Full Chassis with Advanced Cable Maintenance Features. High resolution color display and the following: Line Measurement, TDR, DMM features
0000082468	065012	SMTT-B	SunSet MTT Basic Chassis with monochrome screen. SunSet xDSL Light Chassis Supports Plug-in Modules with Additional Features
0000082372	065013	SSMTT-C	SunSet MTT Color Basic Chassis. SunSet xDSL with Advanced Cable Maintenance Features. High Resolution Color Display and the Following: Line Measurement, TDR, DMM Features

Copper and DSL Testers



HST-3000 with Copper and ADSL Package

Copper and DSL Testers

The HST-NS-Pkg-1 allows the technician to completely qualify the copper pair before testing the ADSL service. The technician will be able to verify that the customer can log into and surf the Web.

- The package includes:
 - HST-3000C - HST-3000 mainframe
 - HST-3000TDR - TDR option
 - HST-3000-RFL - RFL option
 - HST-3000IP - IP suite option
 - HST-3000-WEB - Web browser option
 - HST-3000-CAR2A - ADSL/2/2+/Cu SIM
 - CB-008501 - T/R/G to clip lead
 - CB-008401 - 8 pin mod/2 clip lead
- All HST-3000 test sets can be upgraded for T-1, POTS, VoIP and IP testing

Acterna

Item No.	Mfg. Part No.	Description
0000123893	HST-NS-Pkg-1	HST-3000 with Copper and ADSL Package

T-1 Tester



HST-3000 T-1 Tester

T-1 Tester

The HST-3000 for T-1 allows the technician to completely qualify the T-1 circuit. Verifies the circuit has proper framing, coding and is clean of BIT errors and BiPolar violations. It runs all test patterns including multi-patt.

- Package includes:
 - HST-3000CE - HST-3000 mainframe
 - HST-3000-T1
 - T-1 SIM
 - CB-10615 - 10" Ban-Ban Cable
 - AC-009801 - Hanging Hook
- All HST-3000 test sets can be upgraded for ADSL, POTS, VoIP and IP testing

Acterna

Item No.	Mfg. Part No.	Description
0000123894	HST-3000 For T-1	T-1 Testing Package

Fiber Test Equipment



OFI 200D Optical Fiber Identifier

Fiber Identifiers

The OFI 200D is a low cost, hand-held instrument designed to detect optical signals without disrupting traffic. By clamping the OFI 200D onto a fiber, the unit will indicate if there is no signal, a 2 kHz tone or traffic and show signal direction.

It is used during restoration or rerouting to positively identify fibers prior to cutting or splicing.

- Accepts 250 µm coated fiber
- 900µm coated fiber
- 3mm jacketed fiber cable and ribbon fiber
- No head swapping or adjustments
- Low insertion loss - traffic remains uninterrupted

AFL Telecommunications

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
5361634022	536163	OFI 200D	Optical Fiber Identifier



F6121A Hand-Held Fiber Optical Identifiers

Hand-Held Fiber Optical Identifiers

This self-contained unit identifies optical fiber by detecting the optical signals being transmitted through them. Eliminates the need to open the fiber at the splice point for identification, eliminating the possibility of service interruption.

- Accepts 250 µm coated fiber
- 900µm coated fiber
- 3mm jacketed fiber cable and ribbon fiber

Wilcom

Item No.	Mfg. Part No.	Description
0000044719	F6121A Optical Fiber Identifier	Hand-Held Fiber Optical Identifier



F6222 Hand-Held Fiber Optical Identifiers

Hand-Held Fiber Optical Identifiers

The F6222 detects signal direction with hands-free operation.

- Detects 270Hz, 1kHz, and 2kHz modulation
- Less than 0.6dB insertion loss
- Works on single-mode cable
- Optimized for 1310 and 1550nm wavelengths
- Measures and displays relative core power in dB

Wilcom

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
3058830256	305883	F6222 Advanced Optical Fiber Identifier	Hand-Held Fiber Optical Identifier



Fiber Test Equipment



SLP 4-6D Optical Loss Test Set

Fiber Power Meter/Laser Light Source

The SLP 4-6D combines an OPM 4-4D optical power meter and an OLS 2-dual laser light source. The 4-4D stores reference values at each wavelength for direct loss readings in dB.

- Performs insertion loss measurements on single-mode fiber at 1310 and 1550 nm
- Tests single-mode fiber optic networks
- Used to measure optical power in premise, telco, or broadband fiber optic networks
- Measures insertion loss of multi-mode or single-mode cables
- Calibrated wavelengths: 850, 980, 1310, 1480, 1550, 1625
- Offers automatic wavelength identification and switching when used with wave ID light sources

AFL Telecommunications

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000071088	065726	SLP 4-6D	Optical Loss Test Set Includes Stabilized Light Source and Optical Power Meter



OPM 4-4 Fiber Power Meter

Fiber Power Meters

The OPM 4-4 is used to measure optical power fiber optic networks. When used with an LED or laser light source, the OPM 4-4 can also measure the attenuation (insertion loss) of multi-mode or single-mode optical cables.

- Stores reference setting for each calibration wavelength
- Wavelengths include 850, 980, 1310, 1480, 1550, and 1625
- The OPM runs on a standard 9-volt alkaline battery

AFL Telecommunications

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000044696	065725	OPM 4-4	Fiber Power Meter



FM-1318 Fiber Meter

Fiber Power Meters

The FM-1318 fiber meter is a hand-held and easy-to-use battery powered optical power meter. This unit can be used with any of Wilcom's fiber sources.

- Tests multi-mode and single-mode optical fiber systems
- Has a +5 dBm to -70 dBm dynamic range
- Reference store
- Modulation detection

Wilcom

Item No.	Mfg. Part No.	Description
0000123891	FM-1318	Fiber Power Meter



Fiber Test Equipment



F6230A Visual Fault Locator

Fiber Power Meters

Use the F6230A to find breaks, bad splices, tight crimps, poor components, and bad connections on single-mode or multi-mode operations.

The universal connector eliminates the inconvenience of using a patch cable for direct connection to fiber under test if connector styles are dissimilar.

- Has a universal connector for 2.5mm ferrule
- Provides LED indicator for an active laser mode and low battery
- Pencil style
- Uses one AA alkaline battery

Wilcom

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
011791000	011791	F6230A Visual Fault Locator	Visual Fault Locator



FTK-300 Multimode Verification Kit

Fiber Optic Test Sets

Fluke Networks' SimpliFiber Optical Loss Test Kits provide all the tools you need to verify proper installation and maintain optical fiber cabling infrastructure in one protective carrying case.

Variety of kits contain simple and effective tools for measuring loss and power levels, locating faults and polarity issues and inspecting connector endfaces. Choose from our basic FTK-150 verification kit, the full featured FTK-300 multimode verification kit, our FTK-400 complete verification kit for both multimode and singlemode fiber cabling, or the CIQ-FTK which combines multimode fiber verification with the popular Cable IQ copper cabling qualification kits.

Fluke Networks

Item No.	Mfg. Part No.	Description
0000185445	FTK300	Multimode Fiber Verification Kit
0000185446	FTK400	Complete Fiber Verification Kit



FR2

Optical Fault Locator

The FR2 is a rugged, lightweight, hand-held and low cost Fiber Ranger fault locator for multi-mode and single-mode application using OTDR technology.

Useful applications include: wide area networks (WANs), telecommunications spans of up to 20 kilometers, fiber-to-the-curb, installation and maintenance of multi-mode and single-mode fiber cabling, and military systems.

- Operates at the industry standard wavelength of 1310nm, and can display the distance to the fault in meters or feet
- Designed to pinpoint faults in optical cable, over 20 kilometers away

Wilcom

Item No.	Mfg. Part No.	Description
5337360256	FR2 / 30000203	Optical Fault Locator FR2 W/SC

Fiber Test Equipment



VS 300 Fiber Optic Inspection Scope

Fiber Optic Inspection Microscope

This hand held inspection scope includes a 2.5mm universal fiber connector adapter cap for use with FC, SC and ST connectors, a 2.0 mm cap for D4 connectors and a 1.25 mm cap for LC and MU connector end-face examination.

- Eliminates the optical path to the eye by using a miniature camera and micro display scope
- Provides a 400x power magnification of the connector end-face

AFL Telecommunications

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000085524	065040	VS 300 Fiber Optic Inspection Microscope	Fiber Optic Inspection Scope



Fiber Scope

Fiber Scope

Wilcom's HFS 200 and HFS 400 Hand held microscopes allows the user to visually inspect connectors for cleanliness and polish during connector assembly. Both microscopes come standard with a universal 2.5mm adapter, and other styles are available. They are powered by three AAA alkaline batteries. Internal white LED illumination is rated for 100,000 hours of use. They also provide a comfortable eyepiece even while wearing glasses and has a built in laser safety IR filter for eye protection. It also features a momentary ON/OFF switch for the light source and a fine focus wheel making adjustments easy and convenient for the user.

Wilcom

Item No.	Mfg. Part No.	Description
0000185631	HFS-200X	Fiber Scope 200x Hand Held Microscope
0000161724	HFS-400X	Fiber Scope 400x Hand Held Microscope
0000185634	HFS-2.5	Universal 2.5mm Adapter Head
0000185633	HFS-1.25	Universal 1.25mm Adapter Head
0000185636	HFS-MT-RJ	MT-RJ Adapter Head

Fiber Test Equipment



FT120 Fiber Microscope

Fiber Inspection Viewer

Use Fluke Networks' FT120 fiber microscope to inspect the ends of fiber optic connections. Ensure your termination is smooth, clean and ready for optical transmission. Inspect multimode and singlemode fiber end-faces quickly, and protect eyes from harmful infrared rays with the built-in safety filter.

- Ensures clean, smooth terminations ready for optical transmission
- Special safety filter to protect your eyes from harmful infrared rays
- Handheld microscopes used to inspect the ends of fiber optic connections
- FT120 offers 200X magnification

Fluke Networks

Item No.	Mfg. Part No.	Description
0000185443	FT120	Fiber Viewer, 200x Magnification



FiberInspector Mini Video Microscope

Fiber Inspection Microscope

The FiberInspector Mini video microscope enables inspection of end-faces on all types of installed fiber. The portable video microscope projects a crisp, clear image of microscopic debris and end-face damage. In a survey commissioned by Fluke Networks, end-face contamination was found to be the leading cause of fiber failures. By inspecting end-faces before mating, this common problem can be prevented.

- Inspect all types of installed fiber to prevent the #1 cause of fiber failure
- Quickly determines whether fiber connectors on a hardware device are clean and in good condition without disassembling the device
- Contains high-magnification optics that provide crisp, clear images of microscopic debris and end-face damage
- The exceptionally convenient FiberInspector Mini uses a 200x magnification probe sufficient for inspecting both multimode and singlemode fiber

Fluke Networks

Item No.	Mfg. Part No.	Description
0000185444	FT500	FiberInspector Mini Video Microscope



VisiFault Visual Fault Locator

Visual Fault Locator

The laser-powered VisiFault Visual Fault Locator (VFL) traces fibers, verifies continuity and polarity, and helps find breaks in cables, connectors and splices. Continuous and flashing modes for easier identification. Compatible with 2.5mm and 1.25mm connectors for easy connection.

- Bright red visible laser light source, features continuous and flashing modes
- Accelerates end-to-end fiber continuity checks
- Speeds fiber tracing and identification
- Aids in location of fiber faults including tight bends, breaks and bad connectors

Fluke Networks

Item No.	Mfg. Part No.	Description
0000115462	VISIFAULT	Visual Fault Locator



Fiber Test Equipment



OLS2-DUAL SC Laser Light Source • OLS 4 LED & Laser Light Source

Laser Light Sources

The OLS2-Dual SC light source performs insertion loss measurement on single-mode fiber optic links when used with an optical power meter.

The OLS 4 is also an integrated, two-port LED and laser light source with Wave ID. It has an 850nm and 1300nm LED output from a multi-mode output port and 1310 nm and 1550 nm laser output from a single-mode output port.

- 1310 nm and 1550 nm laser output from a single output port
- 4 modes of operation: dual wavelengths sending ID, single wavelength sending ID, CW, and modulated tone
- Output port is equipped with a removable SC adapter to allow the output connector to be inspected and cleaned

AFL Telecommunications

Item No.	Mfg. Part No.	Description
0000044695	OLS2-Dual SC	Laser Light Source
0000056504	OLS 4	LED and Laser Light Source



FS-1318 Laser Source

Laser Light Source

The FS-1318 is a hand-held battery powered stabilized laser source with three laser outputs. Works with Wilcom's FM-1318 power meter. This unit will accurately test single-mode FTTH cable including: cable attenuation, point-to-point connection verification, end-to-end testing, and system installation verification.

Wilcom

Item No.	Mfg. Part No.	Description
0000123892	FS-1318	Laser Light Source

Fiber Test Equipment



OFL 200 Handheld OTDR

OTDR

The OFL 200 OTDR sets new standards for size, weight, ease-of-use, and value in a telco/broadband OTDR and is smaller than many optical loss test sets.

- Can locate reflective and non-reflective breaks including those caused by crushed fibers
- Provides an integrated 650 nm visual fault locator (VFL) for short-distance troubleshooting and fiber tracing with universal adapter
- 1550 nm single-mode OTDR
- Detects fiber backscatter and fresnel reflections

AFL Telecommunications

Item No.	Mfg. Part No.	Description
0000123890	OFL 200	Handheld OTDR



MTS-NS-Pkg-1 MTS-5100 OTDR

OTDR

The MTS-NS-Pkg-1 OTDR allows the technician to completely qualify fiber, verify fiber length, look for anomalies, and determine fault location.

- Package includes:
 - MTS-E5100 - MTS-5100 mainframe
 - E5100 - color screen
 - E5026 - 1310/1550nm module
 - E5004 - carrying case
 - EUNIPCSC - universal PC-SC adapter
- Traces can be loaded onto a disk for future reference
- Rugged and ideal for field use
- Additional modules available for long range requirements

Acterna

Item No.	Mfg. Part No.	Description
0000123895	MTS-5100 OTDR	MTS-NS-Pkg-1 MTS-5100 OTDR



CMA5000 OTDR

OTDR

The CMA5000 is an all-in-one platform for multi-layer network testing. It includes: installation, commissioning, fault location, restoration and maintenance.

Both have a 37/36dB, 1310/1550nm, OTDR FC connector, Windows®XP, 256 MB RAM.

- CDROM
- Two-slot controller
- Color Display
- 2 PCMCIA and 2PS/2
- Ethernet
- IrDa
- 2 USB
- For the 5000-OTDR-SPNT-P1, a separate USB memory stick must be purchased to allow for file transfers

Anritsu

Item No.	EMBARQ Item No.	Mfg. Part No.	Description
0000095768	066418	5000-OTDR-SPNT-P1	OTDR with FC Connector
0000095769	066419	5000-OTDR-SPNT-P12	OTDR with CD Read/Write



Fiber Test Equipment



FTB-200 Fiber Tester

OTDR

- FTB-200 Test platform
- Outdoor screen
- Built-in VFL "red light" & GeX power meter
- 1310/1490/1550nm, 38/34/37 dB OTDR, SC-APC launch connection
- FTTx "friendly" – designed to test thru splitters & analyze multiple-end reflections from ONT's

EXFO

Item No.	Mfg. Part No.	Description
0000174127	TK-200-S2VPM2D14EA91	OTDR FTB-200 Fiber Tester
0000170588	FP-5	Video Inspection Probe



Mini OTDR

OTDR

- Handheld mini OTDR
- 1310/1550nm, 29/28 dB, with filtered 1625nm 28 dB second port for live fiber testing
- SC-APC connection
- Designed to be utilized both on dark fiber (1310 or 1550nm), and on networks that have already been turned-up/activated and require troubleshooting

EXFO

Item No.	Mfg. Part No.	Description
0000174119	AXS-100-23B-04BEA-91	"In Service" Mini OTDR

Fiber Test Equipment



FiberRanger3 Mini OTDR

Mini OTDR

The Wilcom FiberRanger3 is a lightweight, low cost, hand held mini OTDR in a rugged enclosure that is impact resistant and waterproof. The fast easy to use Optical Time Domain Reflectometer with core functions required to measure optical fiber from one end during installation, repair and verification.

This unit is ideal for field and maintenance of new or existing fiber networks. It is available in multimode, singlemode or both wavelengths. Each Unit can store 255 Traces, and measure dB/Km, 2-Point and splice loss. Certification software is included. It allows the user to view and store traces in the field, then download traces to a PC for further analysis and printing of certifying documents.

Wilcom

Item No.	Mfg. Part No.	Description
0000185622	FR3-M-C FC	OTDR Mini 1300nm, Multimode, with FC/UPC
0000185619	FR3-M-C ST	OTDR Mini 1300nm, Multimode, with ST/UPC
0000185624	FR3-S-C FC	OTDR Mini 1310nm, Singlemode, with FC/UPC
0000185625	FR3-S-C ST	OTDR Mini 1310nm, Singlemode, with ST/UPC
0000185628	FR3-SD-C FC	OTDR Mini, 1310, 1550nm, Singlemode, with FC/UPC
0000185629	FR3-SD-C ST	OTDR Mini 1310, 1550nm, Singlemode with ST/UPC
0000185626	FR3-S1-C FC	OTDR Mini 1550nm, Singlemode, with FC/UPC
0000185627	FR3-S1-C ST	OTDR Mini 1550nm, Singlemode, with ST/UPC
0000185620	FR3-M1-C FC	OTDR Mini 850nm, Multimode, with FC/UPC
0000185621	FR3-M1-C ST	OTDR Mini 850nm, Multimode, with ST/UPC
0000185622	FR3-MD-C FC	OTDR Mini 850, 1300nm, Multimode, with FC/UPC
0000185623	FR3-MD-C ST	OTDR Mini 850, 1300nm, Multimode, with ST/UPC
0000185616	FR3-C-Tri FC	OTDR Mini 1310, 1490, 1550nm, with FC/UPC
0000185617	FR3-C-Tri ST	OTDR Mini 1310, 1490, 1550nm, with ST/UPC
0000185612	FR3-C-Quad FC FC	OTDR Mini 850, 1300, 1310, 1550nm, Singlemode-FC / Multimode-FC
0000185613	FR3-C-Quad FC ST	OTDR Mini 850, 1300, 1310, 1550nm, Singlemode-FC / Multimode-ST
0000185614	FR3-C-Quad ST FC	OTDR Mini 850, 1300, 1310, 1550nm, Singlemode-ST / Multimode-FC
0000185615	FR3-C-Quad ST ST	OTDR Mini 850, 1300, 1310, 1550nm, Singlemode-ST / Multimode-ST



Max Tester

Max Tester

- MaxTester, all-in-one-tool
- 3 wavelength light source & power meter
- Measures bi-directional attenuation/ ORL at 1310/1490/1550nm
- Stores test data and allows downloading to a PC. SC-APC connections

EXFO

Item No.	Mfg. Part No.	Description
0000174120	FOT-932X-5-EA-EUI-91	MaxTester- Handheld, Measures Optical Return Loss



Fiber Test Equipment



Power Meter

- PON Power Meter, 2 Ports, Extended range, BPON ,EPON, GPON, SC-APC connection
- Has Red/Yellow/Green LED's to indicate if signal levels are within network tolerances
- Designed specifically for the FTTx environment
- 2 port design allows upstream & downstream wavelengths to pass through the meter and separate measurements are displayed

EXFO Power Meter

Item No.	Mfg. Part No.	Description
0000174125	PPM-352B-EG-ER-EA-91	PONS Power Meter



Fiber Optic Cleaning Kit

Contaminated end-faces are the #1 cause of fiber link failure. Prevent this common problem with Fluke Networks' Fiber Optic Cleaning Kits and Components. These precision fiber optic cleaning kits and components allow effective removal of all contaminants from end-faces on both patch cords and inside ports.

- Prevent the #1 cause of fiber link failure: end-face contamination
- A range of wipers and swabs enable cleaning of all styles of fiber optic connections
- Everything needed for precision cleaning of end-faces on both patch cords and inside ports
- By fitting in your pocket, Fiber Optic Cleaning Cards are conveniently perfect for troubleshooting
- Specially formulated solvent dissolves contaminants, neutralizes static charge and encapsulates particles for removal
- Use the convenient and rugged carrying case to store all of the cleaning components

Fiber Optic Cleaning Kits and Components

Fluke Networks

Item No.	Mfg. Part No.	Description
0000178049	NFC-Kit-Case	Fiber Clean Kit with Case

QoS Triple Play Monitoring Testers



Triple Play Test Set

EXFO's CoLT-450P is a versatile, modular, handheld platform for field installers. The unit combines IPTV QoS measurements with the power to test ADSL, ADSL2+, and VDSL2, making it the industry's first handheld test set to support IPTV and HDTV over standards-based VDSL2.

Key advantages of the CoLT-450P include:

- IP layer testing; including ping, traceroute and web download speed
- Real-time Media Delivery Index (MDI) measurements of video streams
- VoIP testing supporting SIP and MGCP
- IPTV testing supporting MPEG2, MPEG4 (H .264/Part 10, Part 2) transport streams

EXFO CoLT-450P

Item No.	Mfg. Part No.	Description
0000185473	CL4P-MC/CXADSL2PMD0	CoLT-450P Test Set with ADSL2+ Module
0000185475	CL4P-VDTS	IPTV Analysis Option
0000185474	CL4P-MC/IFVDSL2MOD	CoLT-450P Test Set with VDSL2 Module

