

FIS HAND HELD MINI-OTDR



TEST EQUIPMENT



Hand Held Version

For Ruggedized version and all specifications see pg. 8

FIS MINI-OTDR FEATURES

- Lowest Cost Multi-Wavelength OTDR in the Industry
- Small and Lightweight Hand Held Case
- One Button Scan
- Data Storage and Data Download up to 255 Traces
- Certification Software Available
- Single, Dual, Tri and Quad Wavelength Units Available
- Easy Zoom Features
- Event Table and Auto Test Mode

Although very compact, the FIS Mini-OTDR is a full-featured OTDR. It is available in a sleek hand held version, as well as a slightly larger ruggedized version encased in an impact-resistant, waterproof housing.

The FIS Mini-OTDR is ideally suited for repair and maintenance applications as well as new installations including FTTH. Used with FIS Certification Software, the FIS Mini-OTDR enables the user to document and certify networks.

The FIS Mini-OTDR is very fast, producing a trace within one second of pressing the scan button. Among its many features is an easy-to-use Zoom that enables the user to observe the entire link, or zoom in on defects. Also, a CE approved version is available, as well as a 220V model.

In addition to testing and analyzing fiber optic systems, the FIS Mini-OTDR is a great tool for optimizing Quick-Connect Connectors and Mechanical Splices.

Certification Software

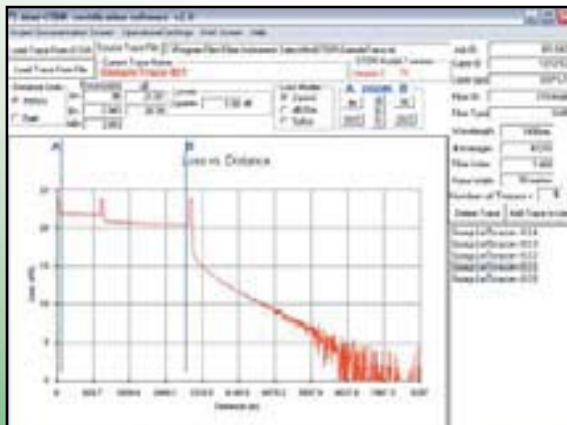
Certification Software Features

- Easy to Use
- Upload Via RS232 (USB Converter Available)
- Full Documentation
- Print Traces from Your Computer
- Print Out Project Cover Sheet
- Supply Customer with Electronic and Hard Copies

FIS HAND HELD MINI-OTDRS

PART #	DESCRIPTION	PRICE
OVM-9199AHH	FIS Hand Held Mini-OTDR 1310nm SM	
OVM-9499AHH	FIS Hand Held Mini-OTDR 1550nm SM	
OVM-9399AHH	FIS Hand Held Mini-OTDR 1310/1550nm SM	
OVM-9599AHH	FIS Hand Held Mini-OTDR 850nm MM	
OVM-9299AHH	FIS Hand Held Mini-OTDR 1300nm MM	
OVM-9699AHH	FIS Hand Held Mini-OTDR 850/1300nm MM	
OVM-9899AHH	FIS Hand Held Mini-OTDR Tri 1310/1490/1550nm	
OVM-9999AHH	FIS Hand Held Mini-OTDR Quad 850/1300/1310/1550nm	
OVM-9799	RS232 Certification Download Software	
OVM-9099PS	110V Power Supply	
OVM-9099PS220	220V Power Supply	
OVM-9099RSC	Mini-OTDR RS232 Cable Kit	
U232P9	RS232 to USB Converter	
OVM-9099HP	(2) Removable Hinge Pins for Ruggedized Case	
OVM-9099HC	Hard Carry Case for Mini-OTDR Hand Held Units	

*Add "220" for 220V versions
 Mini-OTDR units include power supply and RS232 cable kit.



CERTIFY FIBER OPTIC INSTALLATIONS - The FIS Mini-OTDR is a full-function Certifying OTDR when used with FIS Certification Software. View and store traces in the field, then download traces to a PC for further analysis and printing of the certification documents.

TEST FIBER TO THE HOME - The tri-wavelength model, which can test at 1490 nm, can be used to troubleshoot and test your Fiber to the Home (FTTH) applications.

OPTIMIZE QUICK-TERMINATION CONNECTORS - Utilizing real time mode, attach the connector to a launch cable via a mating sleeve, then press the Scan button on the OTDR. Slowly insert the fiber into the connector. The scan of the field fiber will rise up the screen as the optical connection improves. The OTDR's 2-point loss feature shows the throughput of the connector.

**HOUSED IN
IMPACT
PROTECTIVE BOOT**

NEW!

Type	#	Loc. (km)	Loss (dB)	Ref. (dB)	Cumul. (dB)
→	1	0.000		-46.5	0.00
∩	2	7.407	0.10	-49.2	2.87
∩	3	12.641	0.45	-45.9	5.22
∩	4	17.245	0.15	-43.1	6.98
∩	5	17.993	0.49		7.77
Σ	6	18.051	--	>-16.7	7.88

OTDR - Macrobend | onsm60sec.trc VFL OTDR

Events 1310 nm (9 μm)

Trace... Events

TRACE ANALYSIS SCREEN

TEST EQUIPMENT



FIS DELUXE MINI OTDR FEATURES

- One Button Testing
- One Meter Event Deadzone
- Fault Finder Mode
- Automatic Macrobend Identifier
- Pass/Fail Indicator
- TFT color display for excellent viewing in difficult lighting
- Sophisticated Analysis Software included
- Stores Up to 500 Traces
- 8hr Battery Life
- Handheld and Only 2.2 lbs
- USB and RJ-45 Interfaces

Specifications

DYNAMIC RANGE (LONGEST PULSE, 3MIN AVERAGE)	850nm-27dB
	1300nm-26dB
	1310nm-29dB
	1550nm-28dB
PULSE WIDTH (ns)	10, 30, 100, 275, 1000, 2500, 10000
LINEARITY dB/dB	+/-0.05
EVENT DEAD ZONE @ -35dB REFLECTION	SM 1M, MM 3M
ATTENUATION DEAD ZONE @ -35dB REFLECTION	SM 4M, MM 11M
RANGE (KM)	SM 0.65 TO 160
COMMUNICATION INTERFACE	USB AND RJ-45
SIZE (HXWXD)	9.9IN X 4.9IN X 3IN
WEIGHT (LB)	2.2
BATTERY	LI-ION, 8HR
TEMPERATURE (°C)	OPERATING -10° TO 50°
STORAGE (°C)	-40° TO 70°

The FIS Deluxe Mini OTDR offers powerful testing capabilities for all types of optical networks. It is a compact and durable instrument with an intuitive user interface suitable for operation indoors or in the field. The FIS OTDR has the power and features necessary for both new technicians and advanced users. Select simple one button testing for pass/fail results and length data. Experienced users will like the advanced event and trace features. The included macrobend identifier simplifies troubleshooting and installation. Includes FC, SC and ST interchangeable adapters, Li-ion batteries, AC charger and analysis software.

FIS HAND HELD MINI-OTDRS

PART #	DESCRIPTION
OVH-8513	Multimode OTDR, 850/1300nm
OVH-1315	Singlemode OTDR, 1310/1550nm
OVH-QUAD	Quad OTDR, 850/1300/1310/1550nm
OVH-CASE	Softsided Carry Case

FIS RUGGEDIZED MINI-OTDR

TEST EQUIPMENT



Ruggedized Version



Specifications

WAVELENGTH OF OPERATION	850, 1300, 1310, 1490, 1550nm, +/- 20nm
CONNECTOR TYPE	FC or ST (SC on hand held version only)
DYNAMIC RANGE	23dB
DISTANCE ACCURACY	+/- (1mtr + .01% x distance)
LOSS MODES	2 Point, Splice Loss, dB/km
GROUP IOR RANGE	1.024 - 2.048
VERTICAL EXPANSION	0.5, 1, 2, 4 dB/div
UNITS OF MEASURE	Meters/Kilofeet
PULSE WIDTHS	Short Pulse (SP) 4m/13ft Medium Pulse (MP) 50m/164ft Long Pulse (LP) 100m/330ft
DISTANCE RANGE	1Km/3.3Kft, 4Km/13Kft(SP) 4Km/13Kft, 16Km/53Kft(MP) 16Km/53Kft, 64Km/215Kft(LP)
DEAD ZONE	6m
DISTANCE INTERVAL	1m/3ft, 2m/6ft(SP), 4m/13ft, 8m/25ft(MP) 16m/53ft, 32m/105ft(LP)
HORIZONTAL EXP.	16Km/32Kft, 8Km/16Kft, 4Km/8Kft, 2Km/4Kft/div (LP-Ext) 4Km/8Kft, 2Km/4Kft, 1Km/2Kft, 500m/1Kft/div (LP-Norm and MP-Ext) 1Km/2Kft, 512m/1Kft, 256m/512ft, 128m/256ft/div (MP-Norm and SP-Ext) 256m/512ft, 128m/256ft, 64m/128ft, 32m/64ft/div (SP-Norm)
DATA STORAGE	255 traces
COMPUTER & PRINTER INTERFACE	RS232
OPERATION TEMP	0° - +50°C
STORAGE TEMP	-40° - +60°C
AC POWER	120/240 VAC charger/adaptor incl.
BATTERIES	8 AA NiMH Cells
BATTERY LIFE	12 hours (typ.)
RECHARGER TIME	12 hours (typ.)
SIZE/WEIGHT - RUGGEDIZED	8" X 6.5" X 3.5" / 2.75 lbs.
SIZE/WEIGHT - HAND HELD	7.25" X 4.5" X 2.75" / 1.9 lbs.

Certification Software Available
See Hand Held version pg. 6



RS232 to USB Converter

FIS RUGGEDIZED MINI-OTDRS

PART #	DESCRIPTION
OVM-9199A	FIS Rugged Mini-OTDR 1310nm SM
OVM-9499A	FIS Rugged Mini-OTDR 1550nm SM
OVM-9399A	FIS Rugged Mini-OTDR 1310/1550nm SM
OVM-9599A	FIS Rugged Mini-OTDR 850nm MM
OVM-9299A	FIS Rugged Mini-OTDR 1300nm MM
OVM-9699A	FIS Rugged Mini-OTDR 850/1300nm MM
OVM-9899A	FIS Rugged Mini-OTDR Tri 1310/1490/1550nm
OVM-9999A	FIS Rugged Mini-OTDR Quad 850/1300/1310/1550nm
OVM-9799	RS232 Certification Download Software
OVM-9099PS	110V Power Supply
OVM-9099PS220	220V Power Supply
OVM-9099RSC	Mini-OTDR RS232 Cable Kit
U232P9	RS232 to USB Converter
OVM-9099HP	(2) Removable Hinge Pins for Ruggedized Case
OVM-9099HC	Hard Carry Case for Mini-OTDR Hand Held Units

*Add "220" for 220V versions
Mini-OTDR units include power supply and RS232 cable kit.

OPTICAL VERIFIER OV-3 TEST SET

TEST EQUIPMENT

Specifications

LIGHT SOURCE

Singlemode	Source Type:	LASER:
	Wavelengths:	1310nm (+/-30nm) 1550nm (+/-30nm)
	Output Power:	-1 dBm Typ.
	Spectral Width(RMS):	2nm Typ.
	Modulation Modes:	CW, 2kHz
Multimode	Source Type:	SLED:
	Wavelengths:	850nm nominal 1300nm nominal
	Output power:	Single LED -15 dBm Typ. Dual LED -18 dBm Typ.
	Spectral Width(FWHM):	50nm (850nm) 170nm max. (1300nm)
	Modulation Modes:	CW, 2kHz

POWER METER RECEIVER

Detector:	2mm InGaAs Photodiode:
Wavelength Selection:	850nm, 1310nm, 1490nm, 1550nm 1625nm Optional
Noise Equivalent Power (NEP):	-65dBm Typ.
Display Resolution:	.01dB
Measurement Range:	+5dBm to -65dBm @ 1310nm and 1550nm +5dBm to -55dBm @ 850nm +23dBm to -45dBm @ 1310 and 1550nm (CATV)
Accuracy:	+/- .3dB

GENERAL SPECIFICATIONS

Operating Temperature:	-10 to +50° C (14 to 122° F)
Storage Temperature:	-40 to +60° C (-40 to 140° F)
AC Power:	110/120 or 240 volt AC Charger/Adapter
Battery:	Li-Ion Rechargeable
Battery Life(@ 25 deg. C):	8 hours Typ.
Recharge Time:	12 hours Typ.
Physical Dimensions:	220mm H x 100mm W x 40mm D 8.75" H x 4" W x 1.57" D
Weight:	560 grams (1.25 lbs.)

VISUAL FAULT LOCATOR

Wavelength:	650nm
Power Output:	1 mW Typ.
Modulation Modes:	CW, 1Hz
Caution:	Class 2 Laser • Do Not Stare Into Beam LASER Radiation

TALK SET

Mode of Operation:	Full Duplex, Push to Talk
Range:	15dB Singlemode, 12dB Multimode
Accessories:	Comes complete with headset with microphone



OV-3 TEST SET FEATURES

- High Resolution Power Meter Calibrated at 850/1310/1490/1550nm
- 2mm InGaAs Detector
- Backlit Display
- Available as Power Meter Only or as Test Set
- Single or Dual Wavelength
- Stores up to 255 Tests
- Downloads to your computer with included RS232 cable
- Li-Ion Rechargeable Battery
- AC Adapter/Charger
- CATV, VFL & Talk Options
- One-Year Warranty
- Carry Case

FIS OV-3 TEST SET

The FIS Optical Verifier OV-3 is available configured in a number of flexible models to meet the installation and maintenance requirements of all optical networks. The InGaAs photodetector assures accurate and stable measurements across the full range of telecommunications wavelengths. The LED and laser light sources provide stable optical power in continuous wave or modulated modes. The RS-232 feature allows downloading test data to your computer for analysis and documentation. The included Li-Ion batteries and charger ensure hours of uninterrupted field operation and quick re-charges. Include the CATV, VFL and Talk options to any model for additional functionality. The OV-3 is available in a power meter only version with the same great features.

PART #	DESCRIPTION
OV3-PM	Deluxe Power Meter w/ RS232
OV3-85	Test Set with 850nm Light Source
OV3-13	Test Set with 1300nm Light Source
OV3-8513	Test Set with 850/1300nm Light Source
OV3-31	Test Set with 1310nm Light Source
OV3-15	Test Set with 1550nm Light Source
OV3-1315	Test Set with 1310/1550nm Light Source
OV3-1415	Test Set with 1490/1550nm Light Source

Add "C" to part number for CATV version, (Singlemode Only) add \$30.00

Add "V" to part number for VFL Option add \$190.00

Add "T" to part number for TALK Option add \$250.00

FIS HAND HELD LIGHT SOURCE

TEST EQUIPMENT

NEW DESIGN



9051-0000

FIS HAND HELD LIGHT SOURCE FEATURES

- Single or Dual Light Sources
- Continuous Wave (CW) or 2kHz Modulation
- Choice of ST or FC Adapters
- Auto Shut Off & Low Battery Indicator
- Now Available in 1300nm LED with 1310nm Laser Combination
- Optional AC Power Supply
- 30-Hour Typical Battery Life
- Protective Rubber Boot
- One-Year Warranty

FIS HAND HELD LIGHT SOURCE

The FIS Light Source is the perfect match for the FIS Power Meter. The unit has a long battery life and other essential features to get the job done right. Singlemode units are equipped with lasers having a typical output power of -1.0dBm. Multimode units have LED's with a minimum output of -17dBm. Operating Manual and 9V Battery included.

PART #	DESCRIPTION
9050-0000	850nm LED Light Source with ST Adapter
9051-0000	1300nm LED Light Source with ST Adapter
9052-0000	Dual 850/1300nm LED Light Source with ST Adapter
9053-0000	1310nm Laser Light Source with FC Adapter
9054-0000	1550nm Laser Light Source with FC Adapter
9055-0000	Dual 1310/1550nm Laser Source with FC Adapter
9056-0000	1490/1550nm Laser Light Source with FC Adapter
9058-0000	Dual 1300nm LED/1310nm Laser Source (ST & FC)
F1-9103	AC Power Supply for FIS Test Equipment
F1-9103220	220V Power Supply

* Call for additional adapter styles/configurations



FIS TEST SET KIT

Buy a Hand Held Power Meter and Light Source together and FIS will provide them to you in a convenient rugged carry case complete with a reference cord and mating sleeve. To calculate your cost just add the list price of the FIS Power Meter and the Light Source of your choice together. Some sample pricing is listed below. Kits provided with 2.5mm universal adapter on power meter. Multimode light sources are standard with ST adapter and Singlemode light sources are standard with FC adapter.

PART #	DESCRIPTION
F1-813LR	FIS Hand Held PM (0.01dB Resolution), 850/1300nm Dual LED LS
F1-1315LR	FIS Hand Held PM (0.01dB Resolution), 1310/1550nm Dual Laser LS
F1-1415LR	FIS Hand Held PM w/1490nm (0.01dB Resolution), 1490/1550nm Dual Laser LS



FIS RUGGEDIZED LIGHT SOURCE FEATURES

- Low Cost with High Quality
- Ruggedized Housing
- Rechargeable NiMH Batteries
- Designed for Harsh Outdoor Environments

FIS RUGGEDIZED TEST EQUIPMENT

The FIS Ruggedized Light Source is designed for harsh work conditions where traditional hand held units are not appropriate. These units are available with single or dual wavelength light sources. Power Meters are provided with a 2.5mm Universal Adapter. For Light Sources, an ST Adapter for multimode and FC Adapter for singlemode units are standard. Manual and Power Supply/Charger included. Indicate power meter adapter style upon ordering (standard universal 2.5mm adapter included).

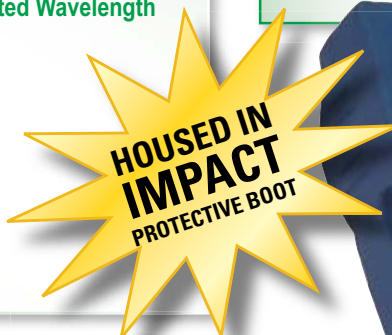
PART #	DESCRIPTION
9086-0000	Ruggedized Light Source 850/1300nm w/ ST Adapters
9087-0000	Ruggedized Light Source 1310/1550nm w/ FC Adapters
9088-0000	Ruggedized Light Source 1490/1550nm w/ FC Adapters

FIS HAND HELD POWER METER

FIS POWER METER FEATURES

- Zero Set Reference Storage Ability at Each Wavelength
- 2mm Germanium Photodiode
- High Resolution Unit Available with 1490nm Calibrated Wavelength
- Standard with 2.5mm Universal Adapter
- Auto Shut Off
- 70-Hour Battery Life
- Optional AC Power Supply
- Low Battery Indicator
- Protective Rubber Boot
- CATV Version Available

FIS now offers the OV-3 Power Meter with rechargeable batteries, storage and download capabilities. See page 9.



TEST EQUIPMENT

FIS HAND HELD POWER METER

A power meter is the essential tool for measuring optical power within a fiber optic link. The FIS Power Meter is a solid performer, with 0.01dB resolution. Standard FIS units test from +5dBm to -65dBm, and FIS CATV units test from +23dBm to -45dBm. Power meters are provided with Operating Manual, 9V Battery, and 2.5mm Universal Adapter (other adapters available).

PART #	DESCRIPTION
F1-8513HR	FIS Hand Held Power Meter with 0.01dB Resolution
F1-8513HRCATV	FIS CATV Hand Held Power Meter with 0.01dB Resolution
F1-8513HR-4	FIS 0.01dB Resolution Power Meter with 1310/1490/1550nm
F1-8513HRCATV-4	FIS CATV 0.01dB Resolution Power Meter with 1310/1490/1550nm
1018-0000	Rugged Carry Case (See picture of Test Set Kit Below)
F1-9103	AC Power Supply for FIS Test Equipment
F1-9103220	220V Power Supply

F1-8513HR

FIS POWER METER ADAPTERS

These Adapters fit all FIS Power Meters and all FIS OV Series.

PART #	DESCRIPTION
F1-8513U	2.5mm Universal Adapter (ST, FC, SC)
F1-8513SC	SC Adapter
F1-8513ST	ST Adapter
F1-8513FC	FC Adapter
F1-8513SMA	SMA Adapter
F1-8513MTP	MTP Adapter
F1-8513MTJ	MT-RJ Adapter
F1-8513LCMU	LC/MU Adapter (1.25mm universal adapter)

Adapters for all FIS Power Meters



FIS RUGGEDIZED POWER METER FEATURES

- Low Cost with High Quality
- Ruggedized Housing
- 0.01dB Resolution Power Meter
- Rechargeable NiMH Batteries
- Designed for Harsh Outdoor Environments
- 850/1310/1490/1550nm Calibrated Wavelengths



FIS RUGGEDIZED POWER METER & TEST SETS

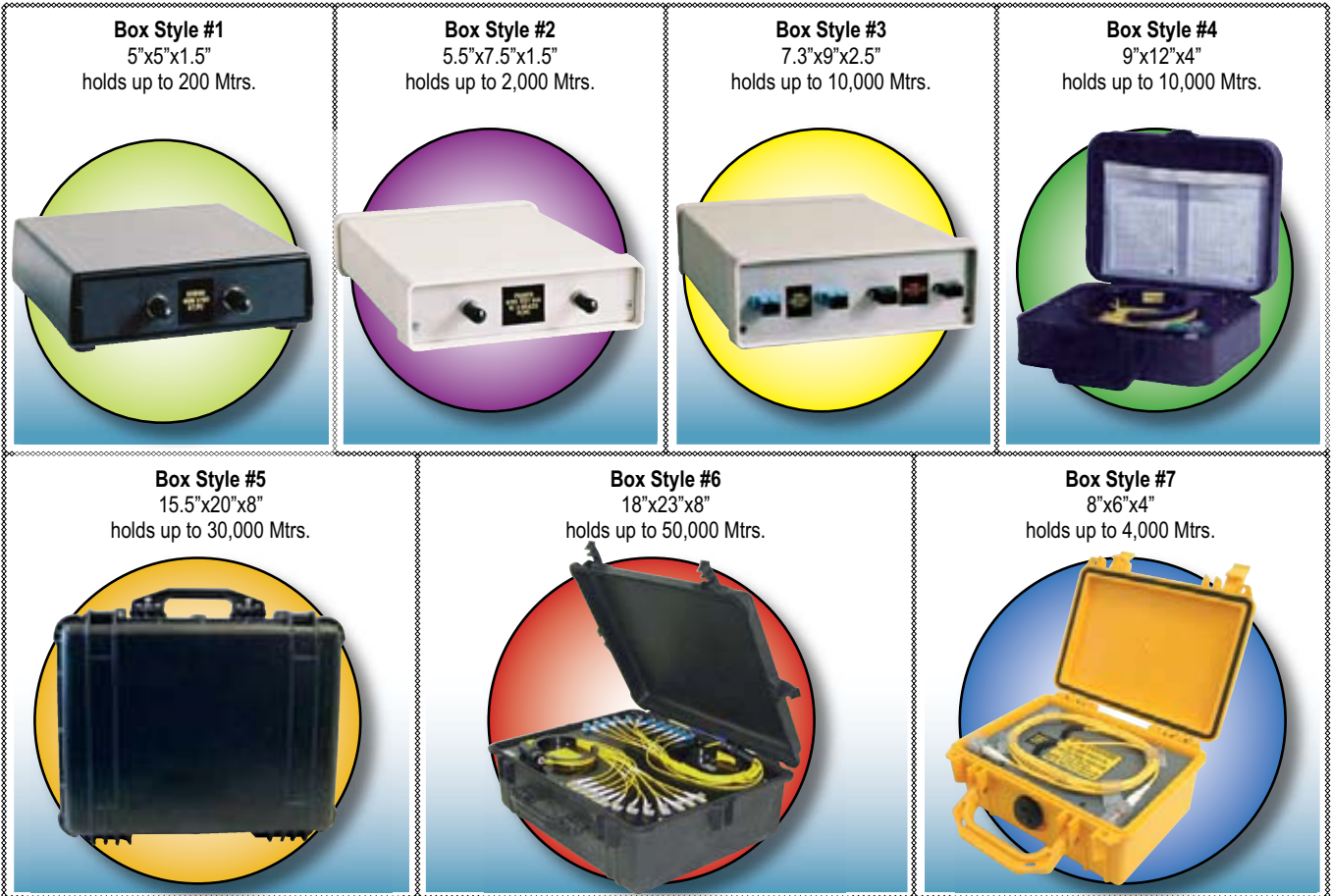
The FIS Ruggedized Power Meter/Loss Test Set is designed for harsh work conditions where traditional hand held units are not appropriate. These units are available with single or dual wavelength light sources. Power Meters are provided with a 2.5mm Universal Adapter. For Light Sources, an ST Adapter for multimode and FC Adapter for singlemode units are standard. Manual and Power Supply/Charger included. Indicate power meter adapter style upon ordering (standard universal 2.5mm adapter included).

PART #	DESCRIPTION
9080-0000	Ruggedized Power Meter w/ 2.5mm Universal Adapter
9081-0000	FIS Test Set/Power Meter - 850nm & 1300nm Light Source w/ ST Adapters and 2.5mm PM Universal Adapter
9082-0000	FIS Test Set/Power Meter - 1310nm & 1550nm Light Source w/ FC Adapters and 2.5mm PM Universal Adapter
9083-0000	FIS Test Set/Power Meter - 1490/1550nm Light Source and Power Meter w/ FC Adapters and 2.5mm PM Universal Adapter

OTDR LAUNCH & PULSE BOXES

TEST EQUIPMENT

Pulse Suppressors, also commonly referred to as OTDR Launch Boxes, Delay Lines or "Dummy Fibers," are used to occupy OTDR "Dead Zones" which enable accurate loss measurements on near-end and far-end connections of the fiber under test. Pulse Suppressors may also be used in an educational setting to simulate networks and during installation and troubleshooting. With the inclusion of additional loss points (fusion or mechanical splices, and/or connector events) the Pulse Suppressor becomes a Test Box for quick verification of your OTDR's calibrated accuracy. Generate an initial scan upon first use of your OTDR, then periodically check future scans against the reference to be sure the equipment is within calibrated range. FIS specializes in customization of Pulse Suppressors and Test Boxes!



BUILD YOUR CUSTOM PULSE SUPPRESSOR OR TEST BOX

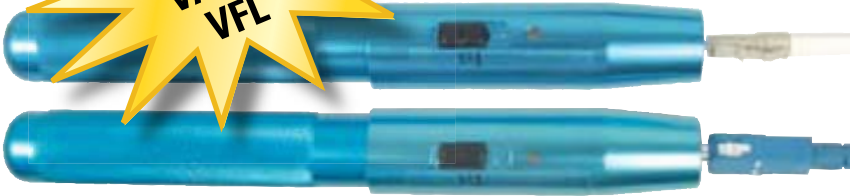
PS - 2 - 3 - 200 - 0 - 0 - B - 7A/YA

BOX PURPOSE PS= Pulse suppressor TB= Test Box (test box includes 3 splices)	BOX STYLE 1= Box #1 2= Box #2 3= Box #3 4= Box #4 5= Box #5 6= Box #6 7= Box #7 (Pigtails Only in boxes 4, 5 & 6)	FIBER #1 LENGTH (in meters) 1= 50/125 2= 62.5/125 3= 9/125 4= Other 8= 50/125 10= GigSx+	FIBER #2 LENGTH (in meters) 0= none 1= 50/125 2= 62.5/125 3= 9/125 4= Other 8= 50/125 10= GigSx+	INTERFACE B= Bulkhead P= Pigtails (Pigtails Only in boxes 4, 5, 6 & 7)	CONN.TYPE 7U= FC/UPC 7A= FC/APC 8 = ST/PC LU= LC/UPC LA= LC/APC MU= MU/UPC YU= SC/UPC YA= SC/APC O= Other
Part # Example: PS-2-3-200-0-0-B-7A/YA Translates to: Pulse Suppressor in 5.5"x7.5"x1.5" box w/200 meters of 9/125µm fiber with 1 FC/APC & 1 SC/APC Bulkhead Interface					

FIS PULSE SUPPRESSOR & TEST BOX PART NUMBER/PRICE EXAMPLES

PART #	DESCRIPTION
PS-7-3-500-0-0-P-XX/XX	Pulse Box Style #7, 500m 9/125µm SMF-28E, 2 meter Pigtails w/Connector of Choice
PS-7-1-100-0-0-P-XX/XX	Pulse Box Style #7, 100m 50/125µm Fiber, 2 meter Pigtails w/Connector of Choice
PS-7-2-100-0-0-P-XX/XX	Pulse Box Style #7, 100m 62.5/125µm Fiber, 2 meter Pigtails w/Connector of Choice
PS-4-3-1000-0-0-P-XX/XX	Pulse Box Style #4, 1000m 9/125µm SMF-28E, 2 meter Pigtails w/Connector of Choice
PS-3-3-1000-2-1000-B-XX/XX	Pulse Box Style #3, 1000m 9/125µm Fiber and 1000m 62.5/125µm Fiber, Bulkhead Adapters of Choice
PS-1-1-100-0-0-P-XX/XX	Pulse Box Style #1, 100m 50/125µm Fiber, 2 meter Pigtails w/Connector of Choice
TB-4-3-1100-0-0-PXX/XX	Test Box, Style #4, 1,100m of 9/125µm Fiber, Pigtails w/Connectors of Choice, 3 Events

**BEST
VALUE
VFL**



FIS POCKET FAULT LOCATOR

FIS engineers have designed the Pocket Fault Locator to be rugged and lightweight, just 7.1" in length and only 4.5oz. The unit has a 30 hour battery life in continuous mode and 40 hours in modulated mode. The bright 650 nm laser in the Pocket Fault Locator ensures fast and easy location of fault points in patchcords, patchpanels and enclosures, and can be used to identify fibers in multi-fiber cables. It is designed for both Singlemode and Multimode fiber applications. These units are shipped with batteries and holster.

PART #	DESCRIPTION
F1-9000	FIS Pocket Fault Locator 2.5mm Universal Version
F1-9000125	FIS Pocket Fault Locator 1.25mm Universal Version

FIS POCKET FAULT LOCATOR FEATURES

- All Aluminum Construction
- 650nm Laser
- 2.5mm or 1.25mm Universal Adapter
- Finds Sharp Bends and Breaks
- Tests for Continuity
- 6-7km Singlemode
- 4-5km Multimode
- Heavy-Duty Belt Holster
- Extra-Long Battery Life with Two "AA" Batteries
- Continuous and Modulated Modes

TEST EQUIPMENT

FIS VISUAL FAULT LOCATOR

The FIS Visual Fault Locator is an essential tool for troubleshooting a fiber optic system. A 1mW fiber coupled laser sends a 650 nm visible red light down the length of the fiber. The escaping light allows easy identification of breaks or severe macro bends. Internal optics are used to optimize the unit's performance for either singlemode or multimode applications. Fiber end identification and continuity testing for long distances are also natural applications. This unit operates with two AA batteries (provided).

PART #	DESCRIPTION
OF-1000-UF	Visual Fault Locator w/ 2.5mm Universal Adapter (SM & MM)
OF-1000U-LC	Visual Fault Locator w/ LC Adapter (SM & MM)
OF-1000U-FCA	Visual Fault Locator w/ FC/APC Adapter (SM)
OF-1000U-SCA	Visual Fault Locator w/ SC/APC Adapter (SM)
OF-1000U-MTRJ	Visual Fault Locator w/ MT-RJ Adapter (SM & MM)

**HIGH
PERFORMANCE
VFL**



FIS FIBER OPTIC TALK SET

Fiber Instrument Sales' new full duplex Talk Set is a hands free unit designed for transmitting voice in both directions in a single fiber using two different wavelengths, 850/1300nm for the multimode unit and 1310/1550nm for singlemode. Includes adjustment for power and sensitivity. The built in VOX (sensitivity) circuit is meant to conserve battery power when the operator is not speaking. In addition to these features the unit also comes with a rechargeable 9V 540mAH battery and a charging port for in-unit charging. The Talk Set comes standard with ST or FC adapter ports. Finally, each Talk Set comes equipped with a plush stereo headset with boom microphone, providing comfort for long-term use and high performance.

PART #	DESCRIPTION
9061-1000	FIS Multimode Talk Set (pair) ST Adapter
9061-2000	FIS Multimode Talk Set (pair) FC Adapter
9062-1000	FIS Singlemode Talk Set (pair) FC Adapter
9062-2000	FIS Singlemode Talk Set (pair) ST Adapter



FIBER CONTINUITY TESTER

Attach your connector to the adapter and push the on/off button. The red LED light efficiently transmits light down the fiber, providing identification at the fiber's far end. Excellent for continuity verification or simple fiber identification when fiber is one of many in an interconnect location. Operates with two "AA" size batteries (provided). The durable hard rubber packaging easily stores in a tool box. **Multimode Only**

PART #	DESCRIPTION
F1-5000U	2.5mm Universal Fiber Continuity Tester (ST, FC & SC)
F1-5000	Fiber Continuity Tester (ST)
F1-5000SMA	Fiber Continuity Tester (SMA)
F1-5000FC	Fiber Continuity Tester (FC)
F1-5000SC	Fiber Continuity Tester (SC)



F1-5000 SC

EXFO HAND HELD TEST EQUIPMENT

NEW!

TEST EQUIPMENT



EXFO 930 MAX TESTER FEATURES

- One touch automated testing of multiple wavelengths for loss & ORL in <10sec.
- Bidirectional
- Combines loss, power and ORL measurement capability
- Multimode and/or Singlemode sources
- Fiber Length testing
- Probe, VFL and Digital Talk options
- Pass/fail thresholds
- High resolution color display

EXFO FOT-930 MAX TESTER MULTIFUNCTION LOSS TESTER

The FOT-930 MaxTester multifunction loss tester is a single tool solution for bi-directional loss and ORL testing in all networks. By combining multiple tools in one powerful platform technician training time is reduced. User configurable pass/fail thresholds and one button testing minimize the opportunity for error. Reliably inspect connector endfaces with the probe option. Stores up to 1000 test reports that can be downloaded to the included software to generate comprehensive custom reports. All units ship with AC charger, Li-ion batteries, case and shoulder strap.

PART #	DESCRIPTION
FOT-932-00-xx-yy-A-zzzzzzz	Multifunction Tester with 1310/1550nm source
FOT-932-MM-12C-zzzzzzz	Multifunction Tester with 850/1300nm source

Add an 'X' after the 930 to specify high power (+26dBm) detector

xx =	00	Without Talk or VFL
	VFL	With Visual Fault Locator
	VFT	With Visual Fault Locator and Talk Set0
yy=	00	Without Probe
	FP1	With 200x Video Inspection Probe, SC, FC and Universal Patchcord Tips
	FP5	With 200x/400x Video Inspection Probe, SC, FC and Universal Patchcord Tips
zzzzzzzz=	EI-EUI-89	FC/UJC
	EI-EUI-90	ST/UJC
	EI-EUI-91	SC/UJC
	EA-EUI-89	FC/APC
	EA-EUI-91	SC/APC



EXFO FIBERBASIX 500 SERIES LOSS TEST EQUIPMENT

EXFO's FiberBasix 500 Series Optical Loss Test Sets feature semi-automatic testing, wavelength switching and Pass/Fail threshold settings. This test set has a memory capacity of 1,000 data items and data transfer to PC via USB connection. The 500 Series light sources feature tone generation for use with the EPM500, remote power referencing. The Fiber Basix gives you Error-Free testing with automatic wavelength recognition with no need to zero-set.

PART #	DESCRIPTION
EPM-502-FOA-XX	500 Series Power Meter with Data Storage/Transfer, Ge Detector
FBK-501-XX*	Test Kit, 500 Series PM and 100 Series 850/1300nm LS
FBK-503-XX*	Test Kit, 500 Series PM with VFL and 100 Series 1310/1550nm LS
FBK-506-XX*	Test Kit, 500 Series PM with VFL and 500 Series 850/1300/1310/1550nm LS

Replace XX with 22=FC, 32=ST, 54=SC Replace XX with EI-EUI-89=FC, 90=ST, 91=SC universal adapters for Light Sources and Kits.
* Kit includes a carrying case, one test jumper or two test jumpers for FBK-506, 507, 508 kits and interchangeable connector adapter on the power meter and a fixed connector on the source.



EXFO FIBERBASIX 100 POWER METERS & LIGHT SOURCES

EXFO's FiberBasix 100 Series optical test equipment are cost-effective, rugged hand held instruments designed for reliable performance. These units are particularly suited to the testing and troubleshooting of fiber optic networks located within the premises.

PART #	DESCRIPTION
EPM-102-FOA-XX	Power Meter with Ge Detector, Choice of Adapter
FBK-101-XX*	LAN Test Kit Including Power Meter and 850/1300nm Light Source

Replace XX with 22=FC, 32=ST, 54=SC
* Kit includes a carrying case, one test jumper and interchangeable connector adapter on the power meter and a fixed connector on the source.

NEW!



EXFO LIVE FIBER IDENTIFIER & TONE GENERATOR

The Exfo Fiber Finder can identify traffic, direction and tone detection on both active and dark fibers. With less than 1dB of induced loss a live fibers can quickly be located and the power measured while minimizing network access time and the possibility for errors. The TG-300 is a non intrusive, non-disruptive tone generator. Because of the low 0.2dB typical loss, they can be used on live fibers. The Fiber Finder and Toner work on all wavelengths and fiber types. One headpiece works on 900µm, 1.6mm and 3mm jackets and tones of 270Hz, 1kHz and 2kHz. The TK-FF kit includes both the Fiber Finder and Toner along with a case, AC adapter and an instrument clamp to aid single person operation.

PART #	DESCRIPTION
LFD-300	Live Fiber Identifier
TG-300	EXFO Fiber Toner
TK-FF	Fiber Identifier Kit – LFD-300 plus TG-300

More Fiber Identifiers on pg 18.

EXFO HAND HELD TEST EQUIPMENT

EXFO FTB-150 OTDR FEATURES

- 1 m Event Dead Zone
- Rugged and Splash Proof
- Visual Fault Locator and Power Meter Options
- Pass/Fail Result Validation
- Color Touch-Screen Interface
- Large Choice of High-Performance OTDR Modules
- 8-Hour Battery Life Typ.
- FTTx ready: Passive Optical Network (PON) Testing Capability
- Quad-Wavelength Model: 850/1300/1310/1550nm
- Tri-Wavelength Model: 1310/1550/1625nm
- Optional Inspection Probe and VFL
- USB Connectivity



TEST EQUIPMENT

EXFO FTB-150 OTDR

The FTB-150 houses any of EXFO's singlemode OTDR configurations designed to test at up to five essential wavelengths—850, 1310, 1490, 1550 and 1625 nm—covering all fiber applications from long-haul and WDM to metro and FTTH networks. It is also ideal for LAN applications, as it can host any of EXFO's multimode OTDR configurations. All EXFO OTDR configurations provide a stable light source, as well as the option of adding a visual fault locator. Call for other FTB-150 configurations.

PART #	DESCRIPTION
FTB-150-S1-E3-YY-ZZZZZ	FTB-150-ACCESS 1310,1550nm, 37/35dB
FTB-150-S1-PM3-E13-YY-ZZZZZ	FTB-150-FTTx 1310,1550,1625nm, 39/38/36dB w/Power Meter
FTB-150-S1-E5-YY-ZZZZZ	FTB-150-METRO 1310,1550nm, 41.5/39.5dB
FTB-150-S1-E15-YY-ZZZZZ	FTB-150-QUAD 850,1300,1310,1550nm, 27/26/37/35dB

CONNECTORS/ ADAPTERS

Replace -YY by	EI	UPC, standard connector
Replace -ZZZZZZ by	EA	APC, standard connector
	EUI-89	FC connector adapter narrow key
	EUI-90	ST connector adapter (EI only)
	EUI-91	SC connector adapter

VFL OPTION

650 nm Visual fault locator with universal 2.5 mm adapter	ORDERING NUMBER
	Add -VFL at the end of the product code

SCREEN OPTION

Outdoor enhanced screen	ORDERING NUMBER
	Replace -S1 with -S2

PROBE OPTION

DESCRIPTION	DESCRIPTION
Fiber Inspection Probe connection, cable and 200X video inspection probe (FIP-P1) with -FC tip (FIPT-FC), SC tip (FIPT-SC), and universal 2.5mm patchcord tip (FIPT-U25M)	Add -FP1 at the end of the product code
Fiber Inspection Probe connection, cable and 200X/400X video inspection probe (FIP-P5) with -FC tip (FIPT-FC), SC tip (FIPT-SC), and universal 2.5mm patchcord tip (FIPT-U25M)	Add -FP5 at the end of the product code

EXFO VCS20 TALK SET FEATURES

- Four Instruments in One
- Up to 50dB Dynamic Range
- Clear Digital Voice Transmission
- Hands-Free Operation
- Three-Way Powering
- Multi-Party Option
- Rugged Housing

EXFO VCS20A TALK SET

The VCS-20A combines four convenient tools in a single test set: a full-duplex digital talk set, a stable light source, a 2kHz tone generator and a 2kHz tone detector. The light source is calibrated and is stable over time and temperature variations. Use continuous wave selection to measure attenuation and insertion loss. **Sold individually, for complete set two units are required.**

PART #	DESCRIPTION
VCS20A-02C-74	EXFO Talk Set 1300nm LED MM, ST, 26dB(62.5/125µm) Dynamic Range
VCS20A-02BL-50	EXFO Talk Set 1310nm Laser SM FC/PC 45dB Dynamic Range
VCS20A-03BLER-EIEUI89	EXFO Talk Set 1550nm Laser SM FC/UPC 50dB Dynamic Range



Anritsu

Discover What's Possible™



TEST EQUIPMENT



MS2721A



MS2711D



ANRITSU WIRELESS TEST EQUIPMENT

ANRITSU SPECTRUM MASTER - MS2721A

Spectrum Master model MS2721A is an entirely new instrument for deploying, maintaining and troubleshooting wireless base stations and Wi-Fi (802.11a,b and g) systems. The first fully-functional handheld spectrum analyzer designed to conduct highly accurate analysis on the new wave of wireless signals, including 802.11a, 3G, ultra-wideband, and WiMax. Weighing in at less than 7 pounds, it is equally at home on the engineering bench and in the field. **Typical Applications:** Field and interference analysis of 3G, 802.11a/b/g and other emerging signal types. **Features:** Measure capability for applications up to 7.1 GHz, Handheld, battery-operated design, Built in pre-amplifier, Quick Zoom-in, Zoom-out display in 1-2-5 sequence, Dedicated One-button measurements, Store up to 2000 measurement test set-ups, Save up to 2000 measurement traces, RJ45 Ethernet 10/100 Base T and USB 2.0 interfaces, Handheld (12" x 8" x 3") 6.4 lbs.

PART #	DESCRIPTION
MS2721A	Handheld Spectrum Analyzer, 9 kHz to 7.1 GHz
2000-1032	Portable Antenna, 50 Ohm, SMA (m), 2.4 to 2.5 GHz
2000-1361	Antenna, 5725 to 5825 MHz, SMA male connector

ANRITSU SPECTRUM MASTER - MS2711D

The Spectrum Master model MS2711D features several smart measurements that make cellular, DCS/PCS and WLAN systems and other wireless systems easier than ever before. The MS2711D includes data analysis software, soft carrying case, rechargeable/field-replaceable battery, AC/DC power supply, 12.5V automobile cigarette lighter adapter, and user's guide. **Typical Applications** Transmit spectrum analysis, receive signal strength analysis, and signal strength mapping. **Features:** Measure capability for applications up to 3.0 GHz, Daylight viewable TFT color display, Noise Level <-135 dBm typical, Stores up to 15 measurement test set-ups, Save up to 200 measurement traces, RS232 interface, Handheld (10" x 7" x 2.4") 4.9 lbs.

PART #	DESCRIPTION
MS2711D	Handheld Spectrum Analyzer, 100 kHz to 3.0 GHz
15NNF50-1.5C	Test Port Extension Cable, Armored, 1.5 meters, DC to 6.0 GHz, 50 Ohm, N(m) - N(f)
MS2711D-21	Option 21, Transmission Measurement
MS2711D-29	Option 29, Power Meter

* Call for other configurations and accessories

ANRITSU SITE MASTER - S332D

Site Master S332D, covering 25MHz to 4000MHz is designed to accurately locate and identify RF cable feed-line and antenna system faults. Model is suited for any experience level user for installing, commissioning, troubleshooting and maintaining today's wireless systems. **Features:** Superior Immunity to RF interference, Locate long range problems with 517 data points, Saves up to 25 measurement Test Set-ups, Saves up to 200 measurement traces, RS232 interface.

PART #	DESCRIPTION
S332D	Cable and Antenna Analyzer, 25 MHz to 4.0 GHz, with built-in DTF, Spectrum Analyzer, 100 kHz to 3.0 GHz
S332D-21	Option 21, Transmission Measurement
S332D-29	Option 29, Power Meter
633-27	Rechargeable Battery, NiMH
ICN50	InstaCal Calibration Module, 50 Ohm, 2 MHz to 4.0 GHz, N(m)
15NNF50-1.5C	Test Port Extension Cable, Armored, 1.5 meters, DC to 6.0 GHz, 50 Ohm, N(m) - N(f)

* Call for other configurations and accessories

ANRITSU CMA 50 HANDHELDS

The new Pocket CMA line includes many advanced features for FTTx, CATV and LAN testing. All units feature auto wavelength recognition, pass/fail thresholds and data storage capability. The all-in-one loss test sets can combine up to 4 sources in a single unit with a power meter. Options include ORL and RJ45 interface network testing. All models include NiMH battery, AC charger, carry pouch, USB cable. Specify adapter "Y" when ordering.

PART #	DESCRIPTION
50LTS-35-XC	Singlemode Loss Test Set, 1310/1550nm
50LTS-35-BC	Bi-Directional Singlemode Loss Test Set, 1310/1550nm
50LTS-83-XC	Multimode Loss Test Set, 850/1300nm
50LTS-8335-BC	Quad Bi-Directional Loss Test Set, 850/1300/1310/1550nm
50LTS-35-OC	Bi-Directional Singlemode Loss Test Set w/ ORL, 1310/1550nm
CMA50POUCHA	CMA50 Soft Case

IDEAL SIGNALTEK COPPER TEST EQUIPMENT

IDEAL SIGNALTEK FEATURES:

- Gigabit Performance Qualification – Test to IEEE 802.3 standards
- Selectable Performance Testing – qualify performance of Data, Voice over IP, and IP Video applications
- Performs Gigabit Ethernet link establishment test in 10 seconds
- Data Monitoring to detect intermittent network problems
- Intuitive Graphical User Interface for fast and easy operation
- Internal and USB Data Storage – store 30,000 tests internally or unlimited on USB drive
- Prints Easy-to-Read Pass/Fail Qualification Reports
- Can test both Copper and Fiber Optics links

PART #	DESCRIPTION
33974	SIGNALTEK Cabling system & Link Qualifier, Copper only
33987	SIGNALTEK Cabling system & Link Qualifier, Copper only, Fiber ready
SFP13X0	SIGNALTEK 13X0nm SM/MM Fiber Module (set of 2)
SFP850	SIGNALTEK 850nm MM fiber Module (set of 2)



ANRITSU CMA4500 ACCESSORIES

PART #	DESCRIPTION
4500-HRDCSE	CMA4500 Hard Transit Case w/handle & wheels
4500-SFTCSE	CMA4500 Soft Carry Case
OPTION-501	Internal CD-RW Drive

ANRITSU CMA5000 ACCESSORIES

PART #	DESCRIPTION
NETWORKS	Emulation Software (\$695.00 w/purchase of unit)
531DLXCASE	CMA5000 SBA/MBA Hard Transit Case
522SCASE	CMA500 Soft Bag for SBA & MBA



ANRITSU CMA4500 & 5000 OTDR PACKAGES

A powerful Windows-based unit, with large 10.4" color display, 20GB hard drive, touch screen and hard key user interfaces and several optics options to cover any testing needs from singlemode to multimode, from 24 to 50dB. Includes Windows XP Pro Desktop and optional CD/RW drive. Additional OTDR packages available. (specify adapter)

CMA5000 MAINFRAMES

PART #	DESCRIPTION
5000-150-DC	CMA5000 Mainframe Small Bay Adapter - 2 Module Capacity CD-R, WinXP Desktop
5000-250-DC	CMA5000 Mainframe Medium Bay Adapter - 4 Mod Capacity CD-R, WinXP Desktop

CMA5000 MULTIMODE MODULES

PART #	DESCRIPTION
5266-000-OTDR	Multimode 24/26dB 850/1300nm
5266-210-OTDR	Multimode 24/26dB 850/1300nm PM & LS
5266-211-OTDR	Multimode 24/26dB 850/1300nm PM, LS & VFL

CMA5000 SINGLEMODE MODULES

PART #	DESCRIPTION
5225-000-OTDR	Singlemode 37/36dB 1310/1550nm
5225-210-OTDR	Singlemode 37/36dB 1310/1550nm PM & LS
5225-211-OTDR	Singlemode 37/36dB 1310/1550nm PM, LS & VFL
5235-000-OTDR	Singlemode 1310/1550nm
5235-210-OTDR	Singlemode 40dB 1310/1550nm PM & LS
5235-211-OTDR	Singlemode 40dB 1310/1550nm PM, LS & VFL

CMA4500 MULTIMODE OTDRS

PART #	DESCRIPTION
4500D-66-0	CMA4500 Multimode OTDR 25/25dB 850/1300nm
4500D-66-2	CMA4500 Multimode OTDR 25/25dB 850/1300nm PM, LS and VFL

CMA4500 SINGLEMODE OTDRS

PART #	DESCRIPTION
4500D-25-0	CMA4500 OTDR 37/36dB 1310/1550nm
4500D-25-2	CMA4500 OTDR 37/36dB 1310/1550nm PM, LS & VFL

CMA4500 QUAD OTDRS

PART #	DESCRIPTION
4500D-61-0	Quad OTDR, 25/25dB 850/1300nm MM, 35dB 1310/1550nm SM
4500D-61-2	Quad OTDR, 25/25dB 850/1300nm MM, 35dB 1310/1550nm SM PM, LS & VFL



ANRITSU MT9083A ACCESSORIES

PART #	DESCRIPTION
MT9083A-002	Visual Fault Locator (VFL) Option
MT9083A-003	SM/MM power meter (+3 to -70dBm)
B0582A	Soft Carry Case for MT9083A
B0583A	Hard Transit Case for MT9083A (suitcase style)
J1295	Cigarette Lighter Power Cord

ANRITSU ACCESS MASTER MT9083A OTDR

The ACCESS Master MT9083A features everything you need for easy, accurate optical testing. With $\leq 1m$ deadzones and up to 38db, the MT9083A is the perfect tool for any application - from 50 foot fiber drops to 50 mile backbone cables. Its compact, lightweight, yet rugged design, internal/USB data storage, easy to use interface and long battery life further ensure you have the tools needed to get the job done. Contact FIS for other configurations. "B" indicates bumper and display cover. Please specify adapter.

PART #	DESCRIPTION
MT9083A-051B	MT9083A SM OTDR, 38dB, 1550nm
MT9083A-053B	MT9083A SM OTDR, 38/36dB, 1310/1550nm
MT9083A-056B	MT9083A FTTx OTDR, 36/34/34dB, 1310/1490/1550nm
MT9083A-057B	MT9083A SM OTDR, 36/34/31dB, 1310/1550/1625nm
MT9083A-063B	MT9083A Quad SM/MM OTDR, 38/36dB @ 1310/1550nm & 28/27dB @ 850/1300nm
MT9083A-064B	MT9083A MM OTDR, 28/27dB, 850/1300nm

CONNECTOR OPTIONS

Specify connector type (add \$158.00 for FC/APC or SC/APC).

PART #	DESCRIPTION
MT9083A-033	LC Connector
MT9083A-037	FC Connector
MT9083A-040	SC Connector
MT9083A-025	FC/APC Connector
MT9083A-026	SC/APC Connector

FIBER OPTIC TEST EQUIPMENT

TEST EQUIPMENT



WILCOM FIBER IDENTIFIER

Wilcom's Optical Fiber Identifiers are rugged metal units with the best sensitivity detection on the market today. They operate by inducing a macro-bend on the fiber, and can be used for singlemode and multi-mode applications. This bend technique allows the unit to detect the presence and direction of light, and in certain Wilcom models allows Relative Core Power measurements to be displayed. The unit can also detect the presence of 2kHz, 1kHz or 270Hz modulated tones. The optical head accepts a 3mm, 250µm /Ribbon or 900µm fibers. A 2mm head is also available. Units are supplied with 9V alkaline battery and carry case.

PART # DESCRIPTION

F6121A	Wilcom Fiber Identifier
F6222	Wilcom Fiber Identifier w/Core Power & Digital Display
F6222C	Wilcom CATV Fiber Identifier
F6121R	Wilcom Ribbon Fiber Identifier



FITEL

FITEL FIBER IDENTIFIER

The Fitel Fiber Identifier uses the super-low insertion loss local detection method of macro-bending. This allows for detection of the optical signals during installation and maintenance without disconnecting the fiber or interrupting the traffic signal. Interchangeable adapter heads for jacketed, coated or ribbon fibers included.

PART # DESCRIPTION

F1-IDH	Fitel Lightfinder ID-H Fiber Identifier
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Wilcom



WILCOM MT-RJ VISUAL FAULT LOCATOR

The Wilcom MT-RJ Visual Fault Locator is used for finding breaks and/or tight bends in multimode optical fibers. The F6240 incorporates a fixed male MT-RJ duplex receptacle, and independently launches a bright visible red laser into channel A or channel B fiber for quick continuity testing.

PART # DESCRIPTION

F6240	Wilcom MT-RJ Visual Fault Locator (Hand Held)
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WILCOM POCKET VISUAL FAULT LOCATOR

The Wilcom Pocket Visual Fault Locator (VFL) is a pencil style that features a universal connector accepting any optical connector style with a 2.5mm ferrule. The F6230A VFL emits a visible red light that can be seen up to 5 km. Designed for Singlemode and Multimode. Includes 2.5mm Universal Adapter.

PART # DESCRIPTION

F6230A	Wilcom Pocket Visual Fault Locator
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HAND HELD MINIATURE FAULT LOCATOR

This hand held fault locator locates breaks and bends, even through up to 3mm jacketed fibers. With an output power of 1mW in SM and MM fiber, it is excellent for end-to-end fiber identification.

PART # DESCRIPTION

F1-FOD11	Hand Held Fault Locator (2.5mm Universal Adapter)
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INFRARED DETECTION CARD

The FIS Infrared Detection Card is optimized for wavelengths between 850 - 1310nm. You will easily be able to visually detect the presence of infrared light when shined upon this card. Manufacturer may vary.

PART # DESCRIPTION

F1-IDC	850 - 1310nm Infrared Card
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FIBER OPTIC OSCILLOSCOPE PROBES-O/E CONVERTERS

Fiber Optic Probes allow the user to display, measure, and analyze fiber optic signals on an oscilloscope or digitizer. The input signal to the fiber optic connector is faithfully reproduced. Applications include verifying the output of a laser, optical transmitter, or fiber optics communications system.

PART # DESCRIPTION

TIA-525IST	Fiber Optic O/E Converter (ST), Amplified 125MHz
TIA-525IFC	Fiber Optic O/E Converter (FC), Amplified 125MHz
TIA-950FC	Fiber Optic O/E Converter (FC), Amplified 750MHz
TIA-1200FC	Fiber Optic O/E Converter (FC), Unamplified 10GHz
TIA-3000FC	Fiber Optic O/E Converter (FC), Amplified 10GHz

FLUKE FIBER OPTIC TEST EQUIPMENT

CERTIFIBER PRODUCT FACTS/FEATURES:

- Measures multimode fiber length and optical loss
- Measures optical power and loss at 850 nm and 1300 nm using LED dual-wavelength sources

VISFAULT LOCATOR PRODUCT FACTS/FEATURES:

- Accelerates end-to-end fiber continuity checks
- Speeds fiber tracing and identification
- Aids in location of fiber faults, tight bends, breaks and bad connectors
- Connects to 2.5mm standard and 1.25mm SFF connectors



TEST EQUIPMENT

PART #	DESCRIPTION
8240-04	Certifiber Kit ICA to measure fiber length/loss auto test
VISFAULT	VISFault Fiber Optic Visual Fault Locator

TEMPO 525 SERIES SMART OPTICAL LOSS TEST SET

Tempo's 525 series is a rugged and easy to use test set with high performance power meter and dual LED or laser light sources. When used as a pair it is capable of bi-directional loss and ORL testing up to -65dB. Features your choice of interchangeable PM and LS adapters, text messaging and powerful Report Writer software. The intuitive user interface steps the technician through the referencing and testing process. Each kit includes one tester with AC power charger, Report Writer™ software, RS-232 cable, adapter cleaner swabs, adapter tool, FiberClean connector cleaner, one UCI adapter and one SOC adapter in a Pelican™ transit case. Two units required for automated loss testing. Specify input and output adapter styles when ordering.

PART #	DESCRIPTION
525-30-PCX	MM Test Set w/ PC Connector and Autotest Dual Wavelength Loss Test
525-60-PCX	SM Test Set w/ PC Connector and Autotest Dual Wavelength Loss Test
525-60-APC	SM Test Set w/ APC Connector and Autotest Dual Wavelength Loss Test
525-60RL-APC	SM Test Set w/ APC Connector and Autotest Dual Wavelength Loss & ORL Test



TEMPO SIDEKICK COPPER FAULT TESTER

The Sidekick family of telecom testers is the perfect instrument for troubleshooting the faults responsible for over 75% of all customer service interruptions. The Sidekick is the only troubleshooter that features the patented Stress Test to measure audible noise on a pair when "stressed" with 90dBmC longitudinal excitation – key to identifying imbalances and series resistance opens. The Leakage Test also detects intermittent resistance faults undetectable with a VOM tester. The Sidekick T&N features transmission and noise testing and is available with a traditional analog or easy to read digital display. The Sidekick Plus has all of the above features plus a TDR and resistive fault locator (RFL) with a flexible analog/digital display. The Sidekick VOC is tailored to the inside wiring found in CATV applications of VOIP.

PART #	DESCRIPTION
1155-5000	Sidekick Plus advanced cable maintenance test set.
1134-5029	Sidekick 7B
1137-5002	Analog Sidekick T&N
1144-5000	Digital Sidekick T&N
1143-5000	Sidekick VOC (CATV)



TEMPO CABLESCOUT® AND TELSCOUT® COPPER TDR

The Tempo line of TDRs is the industry's standard for fault location and testing. The CableScout series is designed for CATV applications. Available in the compact TV90 platform or the powerful TV200 with TestWizard™ automated testing mode. Its high SNR, bandwidth and resolution make it the ideal choice for digital broadband coax. The TelScout series is designed for telephone twisted pair applications. Both units feature dual trace capability. The TS100 also includes the ability to store and download traces. All units include test leads or cables, carry case and rechargeable batteries.

PART #	DESCRIPTION
TV90	CableScout TV90, 6 & 12ns pulse widths
TV220	CableScout TV220, dual trace, 1, 5 & 25ns pulse widths, trace storage/download
TS90	TelScout TS90, 5 to 2500ns pulse widths
TS100-01	TelScout TS100, 5 to 3000ns pulse widths, trace storage/download



TV220

PORTABLE VIDEO MICROSCOPE & INSPECTION PROBE

TEST EQUIPMENT



FIS PORTABLE VIDEO MICROSCOPE FEATURES

- Coaxial Lighting - Ideal for revealing fine scratches, cleanliness
- Oblique Lighting - Reveals cracks, chips, scratches, cleanliness
- Variable Core Illumination - Reveals difficult-to-detect flaws
- Simultaneous Oblique/Coaxial Lighting
- 200X and 400X Magnification Available
- 5.6" LCD Monitor
- Rechargeable Battery (Battery Life: 2.5 Hours. Recharge: 2 Hours)

NEW!
Inspection
Probe



FIS PORTABLE VIDEO MICROSCOPE

Affordable high performance inspection is now available with the FIS Portable Video Microscope. Its rugged waterproof housing and AC/battery operation make it suitable for field use or production environments. Accurately inspect multimode or singlemode connector endfaces with the aid of bright, reliable LED illumination. Select either coaxial, oblique or combination illumination modes for ultimate flexibility in flaw detection. Utilize the variable core illumination port to enhance inspection. Includes a standard 2.5mm universal adapter interface. Accepts optional FIS Video Microscope Probe.

PART #	DESCRIPTION
F1-PVM200-1	200X Magnification Portable Video Microscope
F1-PVM400-1	400X Magnification Portable Video Microscope
F1-PVMP200	FIS 200x Microscope Probe
4204-3000	Universal 1.25mm Focus Adapter for Portable Video Microscope



FIS VIDEO MICROSCOPE

The FIS Video Microscope is a natural choice for fast-paced production environments, where ease of use and fast, accurate inspections are a necessity. The microscope offers a high-resolution look at the end face of most standard connectors, through a choice of either 200X or 400X magnifications. The sleek new design rests securely on a workbench, while the included 4' video cable provides flexibility to place the 9" monitor (also included) wherever it is convenient. The optics and internal components are designed to be rugged and reliable, with no user-serviceable parts. This ensures that the FIS Video Microscope will offer years of trouble-free service.

PART #	DESCRIPTION
F1-VM200	200X Video System with 9" B/W Monitor and Universal Adapter (110 Volt)
F1-VM400	400X Video System with 9" B/W Monitor and Universal Adapter (110 Volt)
F1-VM200P	200X Video System with 9" B/W Monitor and Universal Adapter (220 Volt)
F1-VM400P	400X Video System with 9" B/W Monitor and Universal Adapter (220 Volt)

For 5.5" LCD Option add "LCD" to the end of the part number
Each package comes with: (1) Video Microscope, (1) 9" B&W Monitor, (1) 4' Video Cable, (1) 2.5mm Universal Adapter

FIS MICROSCOPE ADAPTERS

These FIS Microscope Adapters are suitable for use with the FIS Video Microscope only.

PART #	DESCRIPTION
F1-VS25	Universal 2.5mm Adapter
F1-VS12	Universal 1.25mm Adapter
F1-VSAPC25	Universal 2.5mm APC Adapter
F1-VSLC	LC Adapter
F1-VSSMA	SMA Adapter
F1-CNMTRJ	MT-RJ Adapter

HAND HELD VIDEO MICROSCOPE & INSPECTION PROBE



TEST EQUIPMENT

FIS HAND HELD VIDEO MICROSCOPE FEATURES

- Compact housing and probe
- Large 3.5 inch display
- Adjustable brightness, contrast and illumination
- Interchangeable adapter tips
- LED flashlight built into housing

FIS HAND HELD VIDEO MONITOR & MICROSCOPE PROBE

The FIS video microscope has a large, bright 3.5" display in a compact and portable housing. Detect hard to find flaws with the variable coaxial illumination and adjust the video contrast and brightness for optimal viewing. The Probe features coated optics for bright, clear images. The ergonomic design is comfortable to operate and focuses precisely on the connector endface. Li-Ion power ensures long battery life for field use or can be used with the included AC charger. Specify one adapter of your choice when ordering.

PART #	DESCRIPTION
F1-PVMP200	FIS Hand Held Video Monitor & 200x Microscope Probe
F1-PVPASC	SC Adapter Probe Interface
F1-PVPAFC	FC Adapter Probe Interface
F1-PVPAST	ST Adapter Probe Interface
F1-PVPA25	Universal 2.5mm Ferrule Inspection Probe Interface

AEROTECH FERRULECAM INSPECTORS

Aerotech's new line of variable magnification inspection microscopes all have a standard magnification of 200X. All units supplied with microscope, probe, battery pack, A/C charger, soft carry case with shoulder strap and universal 2.5mm male tip. Other tips are available; please call for details.

PART #	DESCRIPTION
AFXM-VD	AFXM Microscope with 3.5" TFT Monitor
AFXM-VD/USB	AFXM Microscope with 3.5" TFT Monitor and USB/Video Capture
AFXM-VDVC	AFXM Microscope with 5" TFT Monitor and USB/Video Capture



MAGNIFYING GLASSES

Protect your eyes and see fiber with ease with the dual purpose Magna-Focuser. These glasses magnify objects 2.5 times, providing a critical visual advantage which still allows user both hands free. Perfect for individuals who find it difficult to work with small parts.

PART #	DESCRIPTION	PRICE
F1-1105	Magna Focuser	\$18.00



FIS EYE LOUPE SET

Set includes 2X, 3X, 5X, 7X and 10X magnifications, these eye loupes allow users to make preliminary inspection of connector mating surfaces for dirt and scratches. The five piece set is made of durable lightweight plastic which makes it an excellent value.

PART #	DESCRIPTION	PRICE
47995	FIS Eye Loupe Set	\$4.95

HAND HELD MICROSCOPES

TEST EQUIPMENT



FIS 200X & 400X MICROSCOPES

These low cost, high quality microscopes are available in 200X or 400X magnification, and utilize white LED light to provide coaxial illumination of connector end-faces. This method of illumination produces high resolution detail of end face scratches, defects and contamination. Three "AAA" batteries provide more than 40 hours of use before battery replacement is required. Provided with a universal 2.5mm adapter, with other connector styles available. Dimensions: 8.76"L x 2.16"H

PART #	DESCRIPTION
F1-VS200F2.5	FIS 200X Microscope
F1-VS400F2.5	FIS 400X Microscope



FIS MINI HAND HELD MICROSCOPE

The new FIS Mini Hand held Microscope is available in 200X magnification. White LED lighting is powered by two "3V" Lithium cell batteries, and enables the user to apply either oblique or coaxial illumination via the unique illumination selection switch. These lightweight and ergonomically contoured microscopes are available with either a universal 2.5mm adapter which accepts ST, FC and SC connectors, or with a universal 1.25mm adapter for LC and MU styles. Dimensions: 6.25"L x 1.93"H

PART #	DESCRIPTION
F1-HHMS2002.5	200X Handheld Mini Microscope w/ 2.5mm Universal Adapter
F1-HHMS2001.25	200X Handheld Mini Microscope w/ 1.25mm Universal Adapter



200X & 400X MICROSCOPES

This low cost, high quality optical microscope is available from FIS with both 200X and 400X magnifications. It utilizes a white light LED for coaxial illumination. The microscope is powered by three "AAA" batteries which run at least 40 hours before replacement. The microscope is provided with a universal adapter for 2.5mm connectors. Adapters for other common connectors are also available.

PART #	DESCRIPTION
F1-VS200C2.5	200X Optical Microscope with Coaxial Illumination
F1-VS400C2.5	400X Optical Microscope with Coaxial Illumination



HAND HELD MICROSCOPE ADAPTERS

These adapters are specifically for use with the above VS - Series hand held microscopes.

PART #	DESCRIPTION
F1-MA1.25	1.25mm Universal Hand Held Microscope Adapter
F1-MAMTRJ	MTRJ Hand Held Microscope Adapter



FIS UNIVERSAL MICROSCOPE

The FIS Universal Microscope is provided with an ST, FC and SC universal faceplate. Insert the ferrule into the microscope and inspect the end face with ease. This complete 100X microscope is perfect for multimode connectors and is easy to use. The FIS Hand Held Universal Microscope is an exceptional value.

PART #	DESCRIPTION
F1-9786	FIS Hand Held Universal Microscope (ST, FC & SC) 100X
F1-9786MT-RJ	MT-RJ Adapter for FIS 100X Hand Held Universal Microscope
F1-9786LC	LC Adapter for FIS 100X Hand Held Universal Microscope
F1-9786VF45	VF-45 Adapter for FIS 100X Hand Held Universal Microscope



NOYES FIBER OPTIC INSPECTION SCOPE

The Noyes OFS-300 with universal adapter (ST, FC, and SC) is a versatile instrument used to inspect fiber optic connectors. Recommended for both multimode and singlemode applications. Connectors slide into scope adapter, providing ease of use with or without tripod. FIS also offers an 8° scope adapter for inspecting angled connectors. Order tripod separately. Operates on 2 "AA" alkaline batteries. Call for additional adapters.

PART #	DESCRIPTION
OFS-300-200C	Noyes 200X Fiber Optic Scope with 2.5mm Universal Adapter
OFS-300-400C	Noyes 400X Fiber Optic Scope with 2.5mm Universal Adapter
VS-300	Noyes 400X View Safe Inspection Scope 2.5mm Universal Adapter (NTSC video output)
8800-02-0031	Noyes 8° SC Scope Adapter (400X Only)
8800-02-0030	Noyes 8° FC Scope Adapter (400X Only)
1400-01-0005	Soft Carry Case
OFS-1000-100	Hard Carry Case



PRIORSPEC II MICROSCOPES

The PriorSpec II provides a novel, folded beam design in an ergonomic, pocket-sized microscope. Uses new stabilized LED illumination for improved bulb and battery life. Laser barrier filter included for added safety. Additional adapters available, please call.

PART #	DESCRIPTION
800-G0301	200/400X Scope, Carry Case, Batteries, 2.5mm Universal Adapter
800-G0401	400X Scope, Carry Case, Batteries, 2.5mm Universal Adapter

TEST EQUIPMENT RENTALS

FIS RENTAL RATES		
PART #	DESCRIPTION	RENTAL PERIOD
Single or Dual - Wave Mini OTDR	FIS Mini OTDR Singlemode or Multimode	Week 2 Weeks 4 Weeks
Quad or Tri - Wave Mini OTDR	Singlemode/Multimode or Singlemode OTDR 850/1300nm or 1310/1550nm or 1310, 1490, 1550nm	Week 2 Weeks 4 Weeks
CMA4000/4500 QUAD OTDR	Quad Wavelength OTDR 850/1300/1310/1550nm	Week 2 Weeks 4 Weeks
CMA4000/4500 Dual OTDR	Dual Wavelength OTDR 850/1300nm or 1310/1550nm	Week 2 Weeks 4 Weeks
Mass Fusion Splicer	12 Fiber Mass Fusion Splicer	Week 2 Weeks 4 Weeks
Single Fiber Fusion Splicer	Single Fiber Fusion Splicer for Both Singlemode & Multimode	Week 2 Weeks 4 Weeks
OV-3 PM & LS	Power Meter & Light Source	Week 2 Weeks 4 Weeks



FIS OV-3



AFL Telecommunications FSM-50S

- Splicers supplied with cleaver and one spare set of electrodes; electrodes are available for purchase
- OTDR's supplied with choice of adapter and launch cable if required
- OV-3 test set supplied with one test cable per unit
- Rental period is from time of shipment until time of return
- No cancellations after product has been shipped



Sumitomo Type 37



FIS Mini OTDR



EXFO FTB-150



Nettest CMA4500



Fiber Instrument Sales, Inc. can save you money by providing a selection of pre-owned test and splicing equipment. We have demonstration models, trade-ins and overstock items available at 20% to 60% off the original price. FIS is also interested in purchasing or trading your pre-owned equipment. Please contact your FIS sales representative for more information on New 2 You Products. You may also contact Jennifer Garlin at ext. 114 or Jim Inman at ext. 120.

TEST EQUIPMENT