

Multi-Tasking OTDR/CWDM Channel Analyzer

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The FTE-7800 is a true multi-tasker with all the features and applications found in much higher priced test equipment. This is a dual wavelength OTDR, Eight Channel CWDM Channel Analyzer, Stable Light Source, Broadband Power Meter, Visual Fault Locator and Video Inspections Scope all in one handheld unit weighing just 2 pounds. The OTDR has a 36/34dB (1310/1550nm) dynamic range and a short 1 meter dead zone. The Channel Analyzer has a 1/4 second refresh rate while scanning the top eight CWDM channels on the ITU grid (1471-1611nm). For flexibility the channel numbers are selected in wavelength or frequency and the information is displayed in graph and table mode on the 4 inch, high brightness color LCD. This unit can store up to ~500 OTDR traces, 1000 CWDM scans, 10000 LTS measurements and 50 Video Scope images. Tests can be downloaded via the USB PC or USB flash ports and documented with the included Cert-Soft certification software to create professional reports. The video scope helps ensure connector cleanliness and integrity prior to connecting to the fiber optic port. The onboard Help system guides new users through operation and assists in setting test parameters. The FTE-7800 is housed in a rugged metal enclosure with a robust protective boot.



FTE-7800 Features:

- Video Inspection System
- Power Meter with Stable Light Source
- Visible Fault Locator
- Rugged Case w/Impact Resistant Boot
- Easy Operation with Help Mode
- 4" Color Display
- Long Battery Life
- USB/PC and USB Flash ports
- Instant On
- Light Weight Rugged Enclosure
- Cert-Soft Software Suite

OTDR Features:

- 36/34dB Dynamic Range
- Short 1 meter Dead Zone
- 1310/1550nm Wavelengths
- Onboard Memory of ~500 traces
- Event Table with Pass/Fail Feature
- Telcordia SR4731 Compatible Software

CWDM Channel Analyzer Features:

- ~1/4 Second Update
- Bar Graph and Table Displays
- Solid State Optics-No Moving Parts
- Impact Resistant Boot
- Stores 1000 CWDM Analyzer Scans



Made In the USA

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FTE-7800 Specifications

OTDR		WDM Channel Analyze	
Wavelength	1310/1550 nm	Wavelength Range	1471-1611nm
Dynamic Range	36/34dB SM,	Channel Spacing	20nm
Pulse Width	5 - 20,000 ns	Channel Pass Band	±6.5nm
Units of Measurement	km, kf, mi	Channel Power Range	+5dBm to -50dBm
Event Dead zone	1m	Absolute Accuracy	±1 dB
Attenuation Dead Zone	4m	Max Composite Power	+23dBm
Resolution	.125 - 32m	PDL	±0.2dB
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)	Adjacent Channel Isolation	30dB
Full Scale Distance Range	1-240km SM	Measurement Time	< 1/2 Second
Typical Real-time Refresh Rate	2 Hz	Readout Resolution	0.01dB
Group Index of Refraction (GIR)	1.024 - 2.048	Return Loss	>40dB
Linearity	± .05 dB/dB	Optical Interface	Universal UPC (FC/SC)
Connector Styles	FC, ST, SC Interchangeable	Graphical Display	Bar Graph and Table View
Memory Capacity	~500	Memory Capacity	1000 scans

Specifications are subject to change without notice.

General

Display	4 in Color TFT
Memory Type	Internal and Flash Drive
Battery	Rechargeable NiMH - 8 hours operating time
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 50 C
Dimensions (w/out rubber boot)	7.75" L x 4.5" W x 2.25" H (197mm L x 114mm W x 57mm H)
Weight	2 lbs
Environmental	Operation -10°C to 50°C
Communications ports	USB and USB Flash Drive Ports
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC/ST and SC Adapters, Cert-Soft Software Suite, Rubber Boot and Manual on CD

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Visible Light Source

Emitter Type	Laser
Wavelength	650nm \pm 5nm
Connector Type	2.5mm Universal
Output Power	1mW Max.

Specifications are subject to change without notice.

Laser Safety

Class IIFDA21 CFR1040.10 &1040.11
IEC 825-1: 1993



Light Source Specifications

Fiber Type	Single mode
Wavelengths	1310 and 1550 nm \pm 20nm
Output Power	0 dBm (-3dBm @ 1625nm)
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz

Specifications are subject to change without notice.

Power Meter Specifications

Detector Type	InGaAs
Connector Type	2.5mm Interchangeable
Dynamic Range	+5 to -77dB (CATV - +25 to -57dB)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	\pm 0.18 dB under reference conditions, \pm 0.25 dB from 0 to -65 dBm, \pm 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Auto Test Range	0 to -40dB

Specifications are subject to change without notice.

Ordering Information

FTE-7800	1310/1550 Dual Wavelength SM OTDR with 8 Channel CWDM Channel Analyzer, VFL and LTS
FTE-SCASE-LG	Soft Case for FTE-6000, FTE-7500 FTE-7800 and FTE-8000 Series
CI1100	Video Probe



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