Advanced Fiber Optic Test Equipment

Terahertz Technologies Inc.

1-888-U.S.-OTDRS

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Mission Statement:

Provide world class test and measurement designs in the industries we serve including Fiber Optics and Photonics technologies, and to continue with our passion for producing the highest quality equipment solutions in these industries. This is our commitment to excellence for our customers, employees, stakeholders and the communities we thrive in.

A Note From The President:

Thank you for visiting our web site, and your continued loyalty and support for our company and industries.

The founders and team members of TTI have a wealth of experience in the Photonics and Fiber Optics test and measurement industry dating back to the early 1970s when fiber was still in its infancy. After many years of ingenuity and dedication, we founded TTI in 1989 with the purpose of continuing to delight our customers, assist them in finding the best solutions, and keeping abreast of the technologies they deploy. Our roots may be in the Mohawk Valley Fiber Optic Industry of central New York, but our reach is global, and we pride ourselves in being a world class producer of the high tech solutions our customers require.

Our technology and product development experiences include design and marketing the world's first commercial processor driven Optical Time Domain Reflectometer. Other historic developments include Radiometric Energy and Power Meters, Optical Choppers, Space Probe Mission Sensors, and the industry standard Electrically Calibrated Pyroelectric Radiometer.

Over the decades we continued developing and refining our technologies with recent introductions in our full line of fiber optic test equipment including state of the art Optical Time Domain Reflectometers, hand held Optical Spectrum Analyzers, CWDM Channel Analyzers, Tunable Laser Sources and advanced autotest/autowave Loss Test Sets.

We also have a full line of optical to electrical converters, fiber optic links and a fiber optic video link system. We offer an optical chopper, laser power and energy meter, a fiber optic laser tachometer, photodiode transimpedance amplifier, and various other custom opto-electronic products that are utilized in the automotive, fiber optics, communications, photonics, power generation and medical equipment industries and for research laboratories, government entities and educational organizations worldwide.

Through our experiences the principle engineers at TTI are proud to have amassed over 100 years of combined experience in photonics and fiber optic instrumentation. We also are extremely proud to be one of the few USA developers and manufacturers of OTDRs and high tech photonics equipment, and look forward to maintaining this commitment.

In closing, we'd like to assure you that we are totally committed to our mission of providing leading world class quality solutions for our colleagues and friends. We maintain a passion for investments in our equipment designs, and development of exceptional customer relations through cooperation and training. We share this commitment in developing a superior TTI team through education, training and personal development.

Thank you for the opportunity to be your loyal servants,

Mike and the TTI Team

FTE-7000A Advanced OTDR

New Lithium-Ion Battery

Features:

- Instant On, Immediate Scan
- Touch Screen, Keypad or Tablet Control
- CW & Fiber Identifier Light Source
- Bluetooth Android VI Operation
- 36 dB Dynamic Range W/1 meter Dead Zone
- Video Scope With Pass/Fail Grading Zones
- Auto-Wavelength Power Meter
- Bidirectional Trace Analysis with Certsoft
- Fib-R-Map Event Analyzer
- SM, MM, Triple and Quad Units Available
- Full Auto, Construction and Expert Modes
- Live Fiber Detection
- Onboard Memory of ~1000 traces
- CertSoft Report Software with .sor Capability
- Dual Trace with Macro Bend Analysis

Touch Screen Operation

There are three methods of operation for the FTE-7000A. There is a hard button method directly on the units keypad, the bright 4 inch display allows for touch screen operation and if a larger display is desired, this OTDR may be operated via Bluetooth on any compatible Android device.

Integrated Video Inspection

Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. The video scope includes an IEC61300-3-35 pass/fail grading zone system. Image files may be stored, allowing users to include connector images with test documents.

Schematic View Trace Analysis

The FTE7000A displays trace analysis in schematic and table views. The trace analysis screen gives users the ability to quickly review the fiber and determine if it meets measurement criteria with its Pass/Fail capabilities.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test at the selected wavelength. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Integrated Loss Test Set

The FTE7000A has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs the auto wavelength recognition will speed testing and help eliminate user error. (Not available on quad wavelength units)

File Storage and File Transfer

There is onboard storage for up to ~1000 traces. Trace files are easily transferred for use with the CertSoft software suite via USB/PC ports.

CertSoft Software Suite

Project reporting and documentation is fast and easy with the supplied CertSoft reporting software. Reports can include, trace graph, schematic and table analysis, loss test table and connector image.

Project Management

Use the parameter screen to enter all parameter and threshold settings for a project, name the project and store files to the active project folder.

Made in the USA

FTE-7000A Specifications

OTDR

Wavelength	850, 1300, 1310,1490,1550, 1625nm ±20nm
Dynamic Range	26/27dB MM, 36/34dB SM
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM , 1-240km SM
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal
Power Supply / Charger	Input 100-240VAC, 50-60Hz, 0.3A, Output 9V, 0.67A
Battery	12 hr. Li-ion
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 C
Dimensions (with rubber boot)	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.8 lbs (.82 kg)
Communications ports	USB/PC Port, Bluetooth
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/ interchangeable mains, Interchangeable FC/ST and SC Adapters, Software, Manual on CD and Protective Rubber Boot

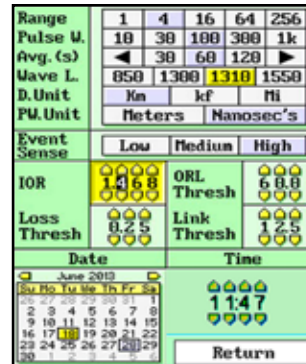Specifications are subject to change without notice.

Ordering Information

FTE-7000A-8513	MM 850/1300nm OTDR with LTS
FTE-7000A-1315	SM 1310/1550nm OTDR with LTS
FTE-7000A-QUAD	Quad Wavelength 850/1300/1310/1550nm OTDR with LTS
FTE-7000A131415	Triple Wavelength 1310/1490/1550nm OTDR with LTS
FTE-7500A131516	Triple Wavelength 1310/15501625nm OTDR with LTS
VIS-300	Video Probe

Add a "C" to the end part the number for CATV version LTS.

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Auto Test Range	0 to -40dB

Light Source

|	
Available Wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm ±20nm (Light Source Wavelengths are Limited by the OTDR Configuration)
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:

Intuitive Expert Parameter Screen
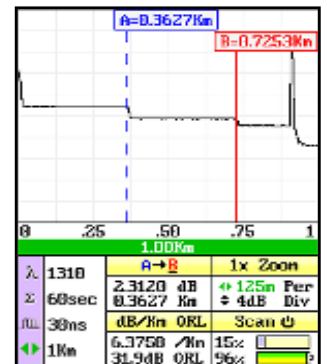
Large - Easy to Read Trace, Icons and Measurements

Fib-R-Map Schematic Event Analysis

Pass Fail Video Scope Feature

Made in the USA
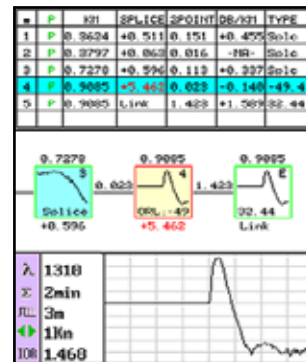
FTE-7000A-EXT/PON OTDR

39dB Dynamic Range

New Lithium-Ion Battery

Features:

- 39 dB Dynamic Range
- Touch Screen, Keypad or Tablet Control
- Dual SM and PON Models Available
- 12 Hour Battery Life.
- CW & Fiber Identifier Light Source
- Bluetooth Android VI Operation
- Video Scope With Pass/Fail Grading Zones
- Auto-Wavelength Power Meter
- Real-time System ORL
- Bidirectional Trace Analysis with Certsoft
- Fib-R-Map Event Analyzer
- Full Auto, Construction and Expert Modes
- Live Fiber Detection
- Onboard Memory of ~4000 traces
- CertSoft Report Software with .sor Capability
- Dual Trace with Macro Bend Analysis

Touch Screen Operation

There are three methods of operation for the FTE-7000A. There is a hard button method directly on the units keypad, the bright 4 inch display allows for touch screen operation and if a larger display is desired, this OTDR may be operated via Bluetooth on any compatible Android device.

Auto-Grade Fault Finder Mode

One button scans the fiber under test, selects best parameters at the selected wavelength and displays event analysis and schematic views of the data.

Schematic View Trace Analysis

The FTE7000A displays trace analysis in schematic and table views. The trace analysis screen gives users the ability to quickly review the fiber and determine if it meets measurement criteria with its Pass/Fail capabilities.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test at the selected wavelength. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Integrated Loss Test Set

The FTE7000A has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs the auto wavelength recognition will speed testing and help eliminate user error. (Not available on quad wavelength units)

File Storage and File Transfer

There is onboard storage for up to ~1000 traces. Trace files are easily transferred for use with the CertSoft software suite via USB/PC ports.

CertSoft Software Suite

Project reporting and documentation is fast and easy with the supplied CertSoft reporting software. Reports can include, trace graph, schematic and table analysis, loss test table and connector image.

Project Management

Use the parameter screen to enter all parameter and threshold settings for a project, name the project and store files to the active project folder.
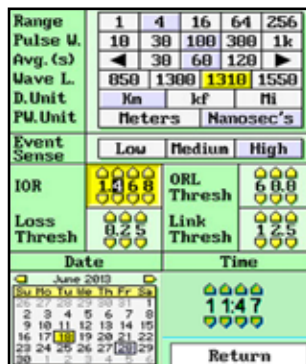
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FTE-7000A-EXT/PON Specifications

OTDR

Wavelength	1310, 1550, 1625nm ±20nm
Dynamic Range	39/39/38dB SM
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	0.25-260km SM
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~4000 Traces
Memory Type	Internal
Power Supply / Charger	Input 100-240VAC, 50-60Hz, 0.3A, Output 15V, 1.2A
Battery life	12hr. LIthium-Ion
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 C
Dimensions (with rubber boot)	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.8 lbs (.82 kg)
Communications ports	USB/PC Port, Bluetooth
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/ interchangeable mains, Interchangeable FC/ST and SC Adapters, Software, Manual on CD and Protective Rubber Boot

Power Meter

Detector Type	InGaAs
Connector Type	1.25 and 2.5 universal, FC, ST and ST
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm

Light Source

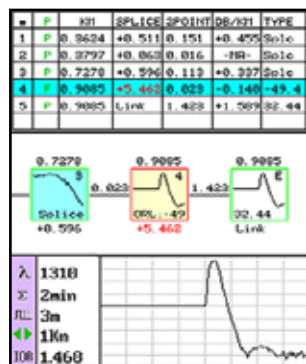|	
Available Wavelengths	1310, 1550, 1625 nm ±20nm (Light Source Wavelengths are Limited by the OTDR Configuration)
Output Power	0 dBm
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz

Intuitive Expert Parameter Screen
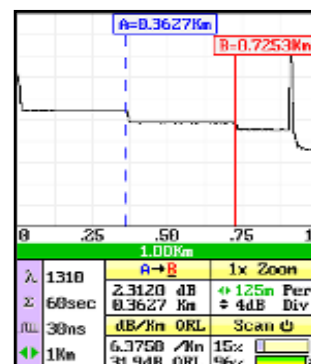
Large - Easy to Read Trace, Icons and Measurements

Fib-R-Map Schematic Event Analysis

Pass Fail Video Scope Feature

Ordering Information
(Probe Sold Separately

FTE-7000A-EXT	1310/1550 nm SM Dual Wavelength OTDR with Video Scope Capability and LTS
FTE-7000A-PON	1310/1550nm with 1625 Acitve, PON OTDR with Video Scope Capability (Power Meter not Available)
VIS300	Video Probe

Made in the USA

FTE-7000A-CWDM OTDR

Now with 36dB Dynamic Range

New Lithium-Ion Battery

Touch Screen Operation

There are three methods of operation for the FTE-7000A. There is a hard button method directly on the units keypad, the bright 4 inch display allows for touch screen operation and if a larger display is desired, this OTDR may be operated via Bluetooth on any compatible Android device.

Autp-Grade Fault Finder Mode

One button scans the fiber under test, selects best parameters at the selected wavelength and displays event analysis and schematic views of the data.

Schematic View Trace Analysis

The FTE7000A displays trace analysis in schematic and table views. The trace analysis screen gives users the ability to quickly review the fiber and determine if it meets measurement criteria with its Pass/Fail capabilities.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test at the selected wavelength. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Integrated Loss Test Set

The FTE7000A has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs the auto wavelength recognition will speed testing and help eliminate user error. (Not available on quad wavelength units)

File Storage and File Transfer

There is onboard storage for up to ~1000 traces. Trace files are easily transferred for use with the CertSoft software suite via USB/PC ports.

CertSoft Software Suite

Project reporting and documentation is fast and easy with the supplied CertSoft reporting software. Reports can include, trace graph, schematic and table analysis, loss test table and connector image.

Project Management

Use the parameter screen to enter all parameter and threshold settings for a project, name the project and store files to the active project folder.

Features:

- 36 dB Dynamic Range
- 12 Hour Battery Life w/2 Hour Quick Charge
- Express Help System
- Touch Screen, Keypad or Tablet Control
- Auto-Grade Fault Finder
- CW & Fiber Identifier Light Source
- Bluetooth Android VI Operation
- Video Scope With Pass/Fail Grading Zones
- Auto-Wavelength Recognition Power Meter
- Real-time System ORL
- Bidirectional Trace Analysis with Certsoft
- Fib-R-Map Event Analyzer
- Full Auto, Construction and Expert Modes
- Live Fiber Detection
- Onboard Memory of ~4000 traces
- CertSoft Report Software with .sor Capability
- Dual Trace with Macro Bend Analysis

Made in the USA

FTE-7000A-CWDM Specifications

OTDR

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Wavelength	1471/1491/1511/1531 or 1551/1571/1591/1611nm +/-3nm
Dynamic Range	36dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 32m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	0.25-260km SM
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~4000 Traces
Memory Type	Internal
Power Supply / Charger	Input 100-240VAC, 50-60Hz, 0.3A, Output 15V, 1.2A
Battery life	12 hr. LIthium-Ion
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 C
Dimensions (with rubber boot)	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.8 lbs (.82 kg)
Communications ports	USB/PC Port, Bluetooth
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/ interchangeable mains, Interchangeable FC/ST and SC Adapters, Software, Manual on CD and Protective Rubber Boot

Power Meter

Detector Type	InGaAs
Connector Type	1.25 and 2.5 universal, FC, ST and ST
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1471,1491,1511,1531,1551,1571, 1591,1611,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm

Light Source

Available Wavelengths	(Light Source Wavelengths are Limited by the OTDR Configuration)
Output Power	0 dBm
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz

Ordering Information
(Probe Sold Separately)

FTE-7000A-S	1471/1491/1511/1531nm, 36dB CWDM OTDR with Video Scope Capability and LTS
FTE-7000A-CL	1551/1571/1591/1611nm, 36dB CWDM OTDR with Video Scope Capability and LTS
VIS300	Video Probe
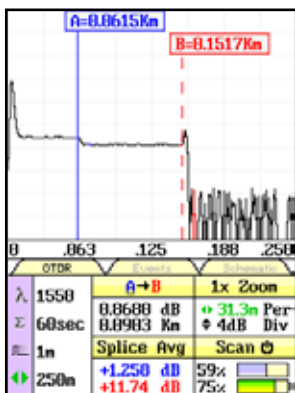
Large - Easy to Read Trace/Events, Icons and Measurements

Intuitive Expert Parameter Screen

Fib-R-Map Schematic Event Analysis

Made in the USA
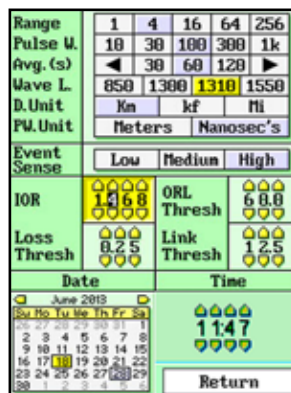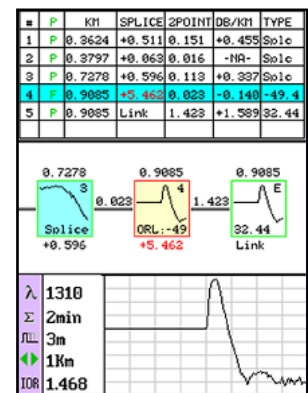
FTE-7500A-CWDM-12 OTDR

New 12 Wavelength CWDM OTDR

Up to 12 Wevelengths in a Single Unit

OTDRs may be order with 8, 10 or even 12 CWDM wavelengths. Standard units include 1471-1611nm for 8 wavelenghts and 1431-1611nm for 10 wavelengths or configure a 12 wavelength unit using the 1471-1611nm 8 wavelength unit and ad 4 additional wavelengths of your choice.

12 Wavelenght Auto Test

Test a fiber at 1, 2 or up to 12 wavelengths with the touch of just one button.

Fault Finder Mode

One button scans the fiber under test, selects best parameters at the selected wavelength and displays event analysis

Broadband Power Meter

Onboard power meter calibrated at up to 12 CWDM wavelengths.

CW Light Source

The FTE7500A-CWDM may be used as a CW light source. Select any of the configured wavelengths as a CW light source for commissioning or for Loss test with the onboard Power Meter.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test at the selected wavelength. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

CertSoft Software Suite

Project reporting and documentation is fast and easy with the supplied CertSoft reporting software. Reports can include, trace graph, schematic and table analysis, loss test table and connector image.

Features:

- 35 dB Dynamic Range
- Express Help System
- CW & Fiber Identifier Light Source
- Video Scope With Pass/Fail Grading Zones
- Integrated Power Meter
- Bidirectional Trace Analysis with Certsoft
- Full Auto, Construction and Expert Modes
- Live Fiber Detection
- Onboard Memory of ~4000 traces
- CertSoft Report Software with .sor Capability
- Dual Trace Capability

Made in the USA

FTE-7000A-CWDM Specifications

OTDR

Wavelength	CWDM Wavelenghts as Configured +/-3nm
Dynamic Range	35dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 32m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	0.25-260km
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal and External USB
Power Supply / Charger	Input 100-240VAC, 50-60Hz, 0.3A, Output 13.6V, 1.2A
Battery life	8 Hour
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 C
Dimensions (with rubber boot)	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.8 lbs (.82 kg)
Communications ports	USB/PC Port
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/ interchangeable mains, Interchangeable FC/ST and SC Adapters for optical port and FC, ST, SC, 1.25mm and 2.5mm universal adapters for power meter port, Software, Manual on CD and Protective Rubber Boot

Power Meter

Detector Type	InGaAs
Connector Type	1.25 and 2.5 universal, FC, ST and ST
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300, 1271-1611CWDM Wavelengths and 1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm

Light Source

Available Wavelengths	(Light Source Wavelengths are Limited by the OTDR Configuration)
Output Power	0 dBm
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz

Ordering Information

FTE-7500A-CWDM-12	1471-1611nm +4 Additional Wavelengths of Choice, CWDM OTDR W/VFL, LTS, Video Scope Capability (Probe Sold Separately)
FTE-7500A-CWDM-10	1431-1611nm 10 Wavelength CWDM OTDR W/ VFL, LTS, Video Scope Capability (Probe Sold Separately)
FTE-7500A-CWDM-OE	1271-1411nm, 8 Wavelength CWDM OTDR W/ VFL, LTS, Video Scope Capability (Probe Sold Separately)
FTE-7500A-CWDM-SCL	1471-1611nm 8 Wavelength CWDM OTDR W/ VFL, LTS, Video Scope Capability (Probe Sold Separately)
FTE-SCASE-LG	Soft Case for FTE7500, FTE600 and FTE8000 Series
VIS-300	Video Probe For FTE7000 and FTE7500 Series

Made in the USA

FTE-7000A-DWDM OTDR

89 Channel Tunable OTDR

Conduct optical time domain reflectometery test at the desired wavelength for DWDM channels 17-61 in the C Band of the ITU Grid.

Tunable Laser Source

Operates as a CW or pulsed Tunable laser source.

Touch Screen Operation

There are three methods of operation for the FTE-7000A. There is a hard button method directly on the units keypad, the bright 4 inch display allows for touch screen operation and if a larger display is desired, this OTDR may be operated via Bluetooth on any compatible Android device.

Fib-R-Map Trace Analysis

The FTE7000A displays trace analysis in schematic and table views. The trace analysis screen gives users the ability to quickly review the fiber and determine if it meets measurement criteria with its Pass/Fail capabilities.

Fib-R-View Connector Analysis

On-board video scope with one touch auto-center, and one touch auto pass/fail analysis of fiber optic connectors.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test at the selected wavelength. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

File Storage and File Transfer

There is onboard storage for up to 4000 traces. Trace files are easily transferred for use with the CertSoft software suite via USB/ PC ports.

CertSoft Software Suite

Project reporting and documentation is fast and easy with the supplied CertSoft reporting software. Reports can include, trace graph, schematic and table analysis, loss test table and connector image.

Project Management

Use the parameter screen to enter all parameter and threshold settings for a project, name the project and store files to the active project folder.

Features:

- Tunable OTDR with 89 C Band Wavelengths
- Tunable CW/Pulsed Laser Source
- 50 and 100 GHz spacing
- Touch Screen, Keypad or Tablet Control
- Fib-R-Map Comprehensive Event Analyzer
- Fib-R-View Auto Pass/Fail/Centering Scope
- 89 Channels (17-61) on the ITU Grid
- 12 Hour Li-ion Batter Pack w/2 Hr. Charge
- Bidirectional Trace Analysis with Certsoft
- Full Auto, Construction and Expert Modes
- Onboard Memory of ~4000 traces
- CertSoft Report Software with .sor Capability

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FTE-7000A-DWDM Specifications

OTDR Specifications

Standard Wavelengths	1528.77-1563.86nm @ 0.4 and 0.8nm Spacing
Dynamic Range	35 dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead zone	1m
Attenuation Dead Zone	4m
Data Points	up to 120,000
Resolution	.125 - 32m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-240km SM
Typical Real-time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity (Internal)	4000

TLS Specifications

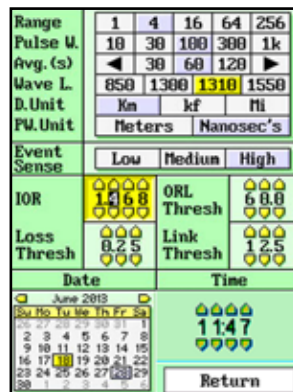|	
Frequency Range	FTE-6000 C 192 - 196 THz (1529-1563nm)
Accuracy	1.5 GHz
Line Width	1 MHz
Side Mode Suppression Ration	45 dB
Output Power Range	0 dBm to +5 dBm
Power Setting Resolution	0.01 dB
Power Variation over Wavelength Range	± 0.5 dB
Minimum Channel Spacing	50 GHz (0.4nm)
Fiber Type	9/125 µm
±Relative Intensity Noise	-140 dB/Hz

General Specifications

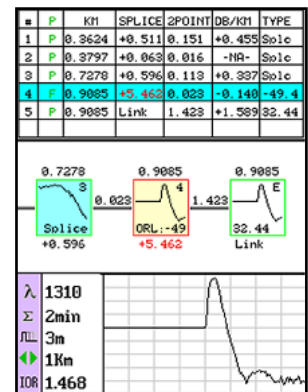|	
Graphical Display	4 in Color Touch Screen
Power Supply / Charger	Input 100-240V 50-60Hz, 0.6A / Output 15V, 1.2A
Battery / Operating Time	Rechargeable Li-Ion / 10 hour
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 C
Dimensions (w/out rubber boot)	7.75" L x 4.5" W x 2.25" H (197mm L x 114mm W x 57mm H)
Weight	1.7 lbs
Communications / Ports	Bluetooth / USB-PC
Connector Styles	FC, SC Interchangeable
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC and SC Adapters, Windows/Telcordia SR4731 Software, Rubber Boot and Manual on CD, 2 stylus

Ordering Information

FTE-7000A-DWDM	C Band DWDM Tunable OTDR/Laser Source 1528-77nm - 1563-86nm
FTE-DWDM-K	FTE7000A-DWDM OTDR/Laser Source and FTE8100-C Mini OSA
VIS300	Video Probe for FTE7500 and FTE7000 Series

Large - Easy to Read Trace/Events, Icons and Measurements

Intuitive Expert Parameter Screen

Fib-R-Map Schematic Event Analysis

Made in the USA

FTE-1700 Economy OTDR

Small and Rugged

The FTE-1700 is small and light weight. It weighs less than 2 lbs., fits comfortably in your hand and built in a rugged enclosure surrounded by a protective rubber boot.

Construction Mode

This feature assists with testing a large number of fibers with similar settings. By pressing just one button the OTDR will test a fiber at two wavelengths, save each test and then display both tests for review.

Bluetooth Operation

Want a larger display, want to geotag your files, or email your traces, use the Bluetooth feature and operate the OTDR with a compatible Android device.

Auto Test

The AutoTest feature of the OTDR does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Trace Analysis

The trace analysis system gives the user the ability to determine quickly if the fiber meets measurement criteria with its Pass/Fail capabilities.

Integrated Video Scope

Use the video scope with our optional VIS-300 video probe to check cleanliness and condition of fiber connectors prior to connection with equipment or fiber under test.

File Storage

Onboard file storage for up to 500 traces and files may be downloaded to a computer through the USB/PC port.

Trace Analysis and Reporting

Project reporting and documentation is fast and easy with a Pass/Fail feature, onboard event table and the supplied report generating software with multi-trace capability.

Integrated Loss Test Set

The FTE7000 has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs with loss test sets, the auto wavelength and auto test capabilities will speed testing and help eliminate user error.

Bluetooth Operation

Features:

- Most Affordable OTDR on the Market
- Bluetooth Operation W/free Android App
- IEC61300-3-35 Pass/Fail Grading
- 32 dB Dynamic Range
- Short Dead Zone
- Integrated Autowave Power Meter
- Stable Light Source
- Ultra Fast Trace Acquisition
- One Button Testing
- Short Dead Zone
- Event Table with Pass/Fail Feature
- Trace Comparison with Trace Overlay
- Simple Graphical User Interface
- Training with Onboard Help Screens
- Telcordia Compatible Software Included
- Light Weight Rugged Enclosure
- SM, MM and Quad Units Available
- Onboard Memory for 500 traces
- Bright Easy To Read Color Display

Made in the USA

FTE-1700 Specifications

OTDR

Wavelength	850, 1300, 1310,1550, ±20nm
Dynamic Range	26/27dB MM, 32/30dB SM (7000E - 30dB)
Pulse Width	20 - 10,000 ns
Units of Measurement	km, kf, mi
Event Dead zone	2m
Attenuation Dead Zone	5m
Resolution	.25 - 64m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM , 1-240km SM
Typical Real-time Refresh Rate	4 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	1000 Traces
Memory Type	Internal
Power Supply / Charger	Input 100-240VAC, 50-60Hz, 0.3A, Output 9V, 0.67A
Battery	4hr
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 50 C
Dimensions (with rubber boot)	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.6 lbs.
Communications ports	USB/PC
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/US, UK, CE, and AU Plugs, Interchangeable FC/ST and SC Adapters, Certsoft Software Suite, Protective Rubber Boot, USB Cable, Manual on CD

*TTI reserves the right to change specifications without notice.*

VFL

Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement 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	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Power input Range	+5 to -77dBm
Autotest Range	0 to -40dB

CW Light Source

Wavelengths	850, 1300, 1310, 1550, 1625 nm ±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

*TTI reserves the right to change specifications without notice.*

Ordering Information

FTE-1700-8513	Dual MM 850/1300nm OTDR with Video Scope and probe, LTS and VFL
FTE-1700-1310	SM 1310nm OTDR with Video Scope and probe, LTS and VFL
FTE-1700-1315	Dual SM 1310/1550nm OTDR with Video Scope and probe, LTS and VFL
FTE-1700-QUAD	MM/SM 850/1300/1310/1550nm OTDR with Video Scope and probe and LTS
FTE-1700E-1310	30 dB Economy SM OTDR 1310nm (No Video Probe, LTS or VFL)
VIS-300	TTI Video Inspection Probe
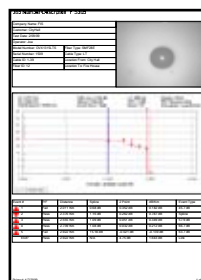
View multiple traces with the certification software and associate loss test results and connector images with traces for test reporting

Use the interactive event table with event map to evaluate traces
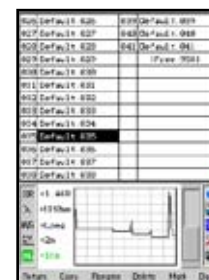
File management screen with file data and representation of highlighted trace

Made in the USA

FTE-5000 Loss Test Set/ORL Meter

Touch Screen

Loss Test Set/ ORL Meter

The LTS/ORL Meter is available in a variety of wavelengths, with ORL. It is available in dual, triple and quad wavelength packages.

Available Wavelengths

The LTS may be configured with dual MM, dual SM, triple or quad wavelengths and the power meter is calibrated at 850, 1300, 1310, 1490 and 1550nm and 1625nm.

Onboard help system

Use the onboard help text for a quick guide to the functions and features available on the FTE-5000

Display

Large 4 inch, easy to read color Touch Screen

Simple to Use

It is designed for simple operation and is suited for field or lab use.

Bluetooth Operation with Android VI App

Operate the LTS with any compatible Android device using the free Android Virtual Instrument Application.

Certsoft Reporting Software

Download test results to the included CertSoft software for report generation. Results may be paired with OTDR traces and connector images for complete report generation.

Integrated Video Inspection

Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system with the optional VIS300 video probe. The video scope includes an IEC61300-3-35 pass/fail grading zone system. Image files may be stored, allowing users to include connector images with test documents.

InGaAs Power Meter

InGaAs based optical power meter calibrated at six wavelengths with a +5 to -77 dBm measurement range.

Fiber Identification

The units also performs fiber identification functions with modulation frequencies of 270, 1000 and 2000 Hz.

Features:

- **Bright Color Touch Screen**
- **Optical Loss/ORL Tester**
- **ORL Measurement Range to -60 dB**
- **Power Meter with -77 dBm Dynamic Range**
- **Video Inspection System**
- **Automated Loss Measurements**
- **Auto Test Up To Three Wavelengths**
- **Auto Wavelength Switching**
- **Universal PM and LS Adapters (FC/ST and SC)**
- **Storage for 5,000 Test**
- **Rechargeable Batteries**
- **USB Interface**
- **Free Report Software**
- **On-Board Help Feature**

Made in the USA

General Specifications

Display	4 in color touch screen
Storage Locations	Up to 5000
Battery/Operating Time	4 AA Rechargeable NiMH / 6 hrs
Power Requirements	Wall mount, universal 100-240V 47-63 Hz 9 VDC Center Positive with, US, UK, Continental Europe, and Australian Plugs
Operating Temperature Range	-10 to 45 C
Dimensions (w/o rubber boot)	7.62" L x 3.88" W x 1.56" H(194mm L x 99mm W x 40mm H)
Weight	0.52 Kg
Accessories Provided	FC, ST, SC adaptors for both Power Meter and Light Source, rubber boot, battery, Power supply/Charger, manual , USB Cable, PC application software

Power Meter

Power Meter Detector Type	InGaAs
Power Meter Dynamic Range	+5 to -77 dB (CATV +25 to -57 dB)
Auto Test Range	0 to - 36 dB
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm
Units of Measurement	dBm, dB, mW, µW
Resolution	0.01dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Modulation Modes Detected	CW, 270 Hz, 1000 Hz, 2000 Hz

Light Source

| Laser Output Power	0 dBm, 1mw
Output Stability	± .05 dB / 24 hrs @ constant temp,, ± .02 dB/C temperature coefficient
Laser Wavelengths Provided	850,1300, 1310, 1490, 1550 and 1625nm (± 20 nm)
Transmitted Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz
Laser Safety Classification	Class I safety per FDA/CDRH and IEC-825-1 regulation
Spectral Width	<3nm typ.

Optical Return Loss Meter

Optical Return Loss Dynamic Range	0-60 dB
ORL Wavelengths	1310/1550nm
Optical Return Loss Accuracy	± .05 dB @ a -55db reflection
Resolution	0.01 dB
Spectral Width (RMS)	<5nm
Connector	FC/APC

TTI reserves the right to change specifications without notice.

TTI reserves the right to change specifications without notice.

Large Easy to Read Color Touch Loss Test Set
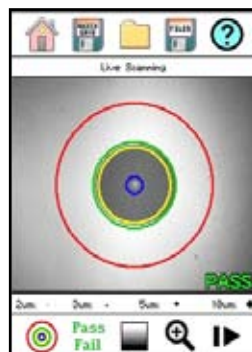
Video Inspection System with IEC61300-3-35 pass/fail grading zone system

The FTE-5000 is available with a -60dB ORL Meter

Ordering Information

FTE-5000-8513	LTS with 850/1300nm Light Source and Video Scope (Probe Sold Separately)
FTE-5000-1315	LTS with 1310/1550nm Light Source and Video Scope (Probe Sold Separately)
FTE-5000-345	LTS with 1310/1490/1550nm Light Source and Video Scope (Probe Sold Separately)
FTE-5000-QUAD	LTS with 850/1300/1310/1550nm Light Source (No Video Scope)
VIS-300	Video Inspection Probe

Add a "C" to the end of the Part number for CATV Versions. Example: FTE-5000-8513C

Made in the USA

FTE-7500A-CWDM OTDR

Flexible Wavelengths Configuration
Standard units are offered in the most common CWDM wavelength combinations. Custom wavelength configurations are available.

Auto Test
The AutoTest feature of the OTDR does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Trace Analysis
The Trace analysis system gives the user the ability to quickly determine if the fiber meets measurement criteria with its Pass/Fail capabilities.

Integrated Power Meter
Wavelength selectable broadband power meter.

Integrated Visual Fault Locator
Use the VFL to locate near end breaks, poor splices, and broken connectors in fiber optic cables or to identify fibers at the far end of a link.

Onboard and External File Storage
There is file storage for up to ~500 traces. Trace files are easily transferred for use with CertSoft software suite via the USB/PC port or the USB flash drive port.

Integrated Video Inspection
Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. Files may be stored, allowing users to include connector images with test documents.
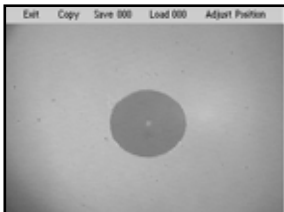
Trace Analysis and Reporting
Project reporting and documentation is fast and easy with a Pass/Fail feature, onboard event table and the supplied CertSoft reporting software with multi-trace capability.

Features:

- Instant On
- Fast Real Time
- 36 dB Dynamic Range
- Flexible Wavelength Configuration
- Event Table with Pass/Fail Feature
- Short Dead Zone
- Interchangeable Fiber Optic Connectors
- Video Inspection Capability
- Broadband Power Meter
- Trace Overlay Capability
- Onboard Memory for ~500 traces
- Visual Fault Locator
- USB Flash Drive Port and Mini USB/PC Port
- Context Sensitive Help
- Light Weight Rugged Enclosure
- Easy To Read Color Display
- CertSoft Software Suite
- Long Battery Life

FTE-7500A-CWDM OTDR Specifications

OTDR

Wavelength	1471/1491/1511/1531nm ±3nm or 1551/1571/1591/1611nm ±3nm
Dynamic Range	36 dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-240km SM
Typical Real-time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal and Flash Drive
Power Supply / Charger	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Battery	8 AA NiMH - 8hr Operation
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 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
Communications ports	USB/PC & USB Flash Drive
Connector Styles	FC, SC Interchangeable
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC/ST and SC Adapters, Manual on CD, CertSoft Software Suite, Protective Rubber Boot

Specifications are subject to change without notice:

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement Range	+5 to -77dB (CATV - +25 to -57dB)
Calibrated Wavelengths	850/1300/1310/131471/1491/1511/1531/1551/1571/1591/1611nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Power input Range	+5 to -77dBm

CW Light Source

Wavelengths	1471/1494/1511/1531nm ±3nm or 1551/1571/1591/1611nm ±3nm
Output Power	0 dBm
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz

VFL

Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

Ordering Information

FTE-7500C-KLMN	1471/1491/1511/1531 CWDM OTDR
FTE-7500C-OPQR	1551/1571/159/1611 CWDM OTDR
CI-1100	Video Probe
FTE-SCASE-LG	Soft Case for FTE-6000, 7500 and 8000 Series

Specifications are subject to change without notice:

With the optional Video probe, you can use the inspection scope to ensure proper cleanliness of connectors prior to inserting them into the OTDR.
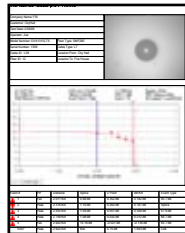
View multiple traces with the certifications software and associate connector images with traces for test reporting

Custom Wavelength Configurations Available

Made in the USA

FTE-7500A PON OTDR

Active Fiber Testing

Use the 1625nm active port for in service maintenance/ troubleshooting testing of PON Networks.

Auto Test

The AutoTest feature of the OTDR does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Construction Mode

This feature assist with testing a large number of fibers with similar settings. By pressing just one button the OTDR will test a fiber at two wavelengths, save each test and then display both tests for review.

Trace Analysis

The Trace analysis system gives the user the ability to quickly determine if the fiber meets measurement criteria with its Pass/Fail capabilities.

Integrated Loss Test Set

The PON OTDR has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs the auto wavelength and auto test capabilities will speed testing and help eliminate user errors.

Visual Fault Locator

Use the VFL to locate near end breaks, poor splices, and broken connectors in fiber optic cables or to identify fibers at the far end of a link.

Onboard and External File Storage

There is file storage for up to ~500 traces. Trace files are easily transferred for use with CertSoft software suite via the USB/PC port or the USB flash drive port.

Integrated Video Inspection

Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. Files may be stored, allowing users to include connector images with test documents.

Trace Analysis and Reporting

Project reporting and documentation is fast and easy with a Pass/Fail feature, onboard event table and the supplied CertSoft reporting software suite with multi-trace capability.

Features:

- Instant On
- Fast Real time
- 39 dB Dynamic Range
- Event Table with Pass/Fail Feature
- Short Dead Zone
- Test Through 1/64 Splitters
- Video Inspection Capability
- One Button Testing
- Interchangeable Fiber Optic Connectors
- Trace Overlay Capability
- Onboard Memory for ~500 traces
- Integrated Auto-Wavelength Loss Test Set
- Visual Fault Locator
- USB Flash Drive Port and Mini USB/PC Port
- On-Screen Tutorials
- Light Weight Rugged Enclosure
- Easy To Read Color Display
- CertSoft Reporting Software
- Long Battery Life

Made in the USA

TERAHERTZ TECHNOLOGIES INC.   WWW.TERATEC.US

FTE-7500A PON OTDR Specifications

OTDR

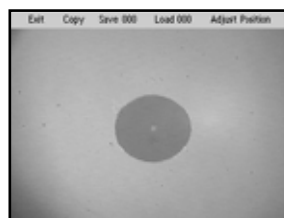|	
Wavelength	1310, 1550, 1625nm ±20nm
Dynamic Range	39/39/38dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM , 1-240km SM
Typical Real-time Refresh Rate	4 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal and Flash Drive
Power Supply / Charger	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Battery	8hr
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
Communications Ports	USB/PC & USB Flash Drive Ports
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC/ST and SC Adapters, Manual on CD, CertSoft Software Suite, Protective Rubber Boot

Specifications are subject to change without notice:

Ordering Information

FTE-7500-131516-ACT	Dark Fiber Port - SM 1310/1550nm Active Port 1625nm with LTS, Video Scope and VFL (Probe Sold Separately)
CI-1100	Video Probe
FTE-SCASE-LG	Soft Case for FTE-6000, 7500 and 8000 Series

VFL

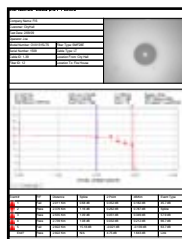|	
Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Auto Test Range	0 to -40dB

CW Light Source

Wavelengths	1310, 1550, 1625 nm ±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:

Video scope images may be stored and included with Cert-Soft test reports

Use the file management system to Copy files to USB drive or to PC for Use with CertSoft software suite

CertSoft test report with attached video scope image

Trace analysis with pass/fail thresholds

Made in the USA

FTE-7500A OTDR

Features:

- Instant On
- Fast Real time
- Up to 39dB Dynamic Range
- Event Table with Pass/Fail Feature
- 1 Meter Dead Zone
- SM, MM, Triple and Quad Units Available
- Integrated Video Inspection System
- Interchangeable Fiber Optic Connectors
- One Button Fault Finder
- Automated Construction Mode
- Trace Overlay Capability
- Onboard Memory for ~500 traces
- Auto-Wavelength Loss Test Set
- Visual Fault Locator
- USB Flash Drive Port and Mini USB/PC Port
- Context Sensitive Help
- Lightweight Rugged Enclosure
- Easy To Read Color Display
- CertSoft Report Generation Software Suite
- Long Battery Life

Onboard Help System

Select the help Icon and the OTDR displays a list of help subjects unique to the current application.

Auto Test

The AutoTest feature does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Construction Mode

This feature assist with testing a large number of fibers with similar settings. By pressing just one button the OTDR will test a fiber at two wavelengths, save each test and then display both tests for review.

Trace Analysis

The trace analysis screen gives users the ability to quickly determine if the fiber meets measurement criteria with its Pass/Fail capabilities.

Integrated Loss Test Set

The FTE7500A has an integrated Loss Test Set. When used with compatible equipment from TTI's 1500 series or other TTI OTDRs the auto wavelength and auto test capabilities will speed testing and help eliminate user error.

Integrated Visual Fault Locator

Use the VFL to locate near end breaks, poor splices, and broken connectors in fiber optic cables or use it to identify fibers at the far end of a link.

File Storage and File Transfer

There is onboard storage for up to ~500 traces. Trace files are easily transferred for use with the CertSoft software suite via USB/PC or USB flash drive ports.

Integrated Video Inspection

Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. Image files may be stored, allowing users to include connector images with test documents.

Trace Analysis and Reporting

Project reporting and documentation is fast and easy with the Pass/Fail feature, onboard event table and the supplied CertSoft reporting software.

FTE-7500A Specifications

OTDR

Wavelength	850, 1300, 1310, 1490,1550, 1625nm ±20nm
Dynamic Range	26/27dB MM, 36/34dB SM, 36/34/34 TRI (EXT 39dB)
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM , 1-240km SM
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal and Flash Drive
Power Supply / Charger	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Battery	8 AA NiMH - 8hr Operation
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 40 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
Communications Ports	USB/PC & USB Flash Drive Ports
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/interchangeable Mains, Interchangeable FC/ST and SC Adapters, Software, Manual on CD and Protective Rubber Boot

Specifications are subject to change without notice.

Visual Fault Locator

Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Auto Test Range	0 to -40dB

Light Source

Available Wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm ±20nm (Light Source Wavelengths are Limited by the OTDR Configuration)
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:

Video Scope Image

File Management System can copy to USB drive or to PC with Supplied Software

Full featured trace analysis with pass/fail feature.

Certification Software with attached video scope image

Ordering Information

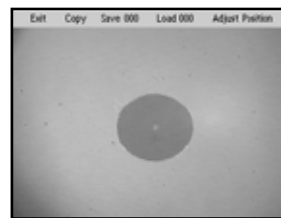|	
FTE-7500A-8513	MM 850/1300nm OTDR with Video Scope, LTS and VFL (Scope Probe Sold Separately)
FTE-7500A-1315	SM 1310/1550nm OTDR with Video Scope, LTS and VFL (Scope Probe Sold Separately)
FTE-7500A-QUAD	Quad Wavelength 850/1300/ 1310/1550nm OTDR with Video Scope, LTS and VFL (Scope Probe Sold Separately)
FTE-7500A-TRI	SM 1310/1550/1625 OTDR With Video Scope, LTS and VFL (Scope Probe Sold Separately)
CI-1100	Video Probe
FTE-SCASE-LG	Soft Case for FTE-6000, 7500 and 8000 Series

Add a "C" to the end part the number for CATV version LTS.

FTE-7800 Multi-Task OTDR

Multi-Task Operations:
1310/1550nm Dual Wavelength OTDR
8 Channel CWDM Channel Analyzer
Broadband Power Meter
CW Light Source
Video Inspection Scope
Visual Fault Locator

OTDR
Full feature36/34dB OTDR with graphical and event analysis displays

8 Channel CWDM Channel Analyzer
Simultaneously test the top 8 wavelengths (1471-1611) on the CWDM ITU Grid

Integrated Power Meter and CW Light Source
The FTE7800 has an integrated Loss Test Set. The broad band power meter is calibrated at all the CWDM wavelength along with 850/1300 and 1625nm.

Integrated Video Inspection
Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. Files may be stored, allowing users to include connector images with test documents.

Integrated Visual Fault Locator
Use the VFL to locate near end breaks, poor splices, and broken connectors in fiber optic cables or to identify fibers at the far end of a link.

Auto Test
The AutoTest feature of the OTDR does a quick test of the fiber conditions, sets the range and pulse width, then produces a trace of the fiber under test. This is ideal to use if unfamiliar with OTDR testing or the approximate length of the fiber is not known.

Construction Mode
This OTDR feature assist with testing a large number of fibers with similar settings. By pressing just one button the OTDR will test a fiber at two wavelengths, save each test and then display both tests for review.

File Storage and File Transfer
There is file storage for up to 1000 OTDR traces. Trace files are easily transferred for use with CertSoft reporting software suite via the USB/PC port or USB the flash drive port.

Features:

OTDR Features
- 36/34dB Dynamic Range
- Short 1 meter Dead Zone
- 1310/1550 Wavelengths
- Onboard Memory of ~500 traces
- Event Table with Pass/Fail Feature

Channel Analyzer Features
- 8 Channels, 1471-1611nm
- ~1/4 Second Update
- Bar Graph and Table Displays
- Impact Resistant Boot
- Stores 1000 CWDM Analyzer Scans

General Features
- Instant On
- Visible Fault Locator
- Long Battery Life
- USB/PC and USB Flash Ports
- Broadband Power Meter and CW Source
- CertSoft software suite Included

Made in the USA

FTE-7800 Multi-Task OTDR Specifications

OTDR

Wavelength	1310, 1550 nm ±20nm
Dynamic Range	36/34dB
Pulse Width	5 - 20,000 ns
Units of Measurement	km, kf, mi
Event Dead zone	1m
Attenuation Dead Zone	5m
Resolution	.125 - 8m
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM , 1-240km SM
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	~500 Traces
Memory Type	Internal and Flash Drive
Power Supply / Charger	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Battery	8hr
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
Communications Ports	USB/PC & USB Flash Drive Ports
Connector Styles	FC, ST, SC Interchangeable
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC/ST and SC Adapters, Manual on CD, CertSoft Software Suite, Protective Rubber Boot

Specifications are subject to change without notice:

CWDM Analyzer

Wavelength	1471 - 1611nm
Channel Spacing	20nm
Channel Pass Band	± 6.5nm
Channel Power Range	-5dBm to -50dBm
Absolute Accuracy	± 1dB
Max. Composite Power	+23dBm
PDL	±0.2dB
Adjacent Channel Isolation	30dB
Measurement Time	<1/2 Second
Readout Resolution	0.01dB
Return Loss	>40dB
Optical Interface	Universal UPS (FC/SC Supplied)
Graphical Display	Bar Graph and Table View
Memory Capacity	1000 Scans

Specifications are subject to change without notice:

Power Meter

Detector Type	InGaAs
Connector Type	1.25mm & 2.5mm Univ, FC, ST and SC
Measurement Range	+5 to -77dBm (CATV +25 to -57dBm)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 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:

VFL

Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

Specifications are subject to change without notice:

CW Light Source

Wavelengths	1310 and 1550 ±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:

FTE-8100 Optical Spectrum Analyzer

Touch Screen

88 Channel DWDM Analyzer
The FTE-8100 Handheld OSA tests up to 88 channels at 50 or 100 GHz channel spacing in the C band of the ITU Grid

Unique 8+1 CWDM Channel Configuration
FTE-8100 may also be configured to test the top eight channels (1471-1611nm) of the CWDM grid along with 1310nm for return path assurance.

Integrated Video Inspection System
Take advantage of the IEC61300-3-35 method "B" video inspection system by using the optional VIS-300 video probe and inspecting connectors to ensure cleanliness for proper readings and to prevent costly damage to optical interface.

Pass/Fail Thresholds
User selectable Pass/Fail thresholds are indicated on the main graphical display by a highlighted background with failed channels falling outside the highlighted area. In the table view, failed measurements are easily identified by being shown in red.

Onboard Help System
Use the onboard help text for a quick guide to the functions and features available on the FTE8100.

Auto Test button
With its one button Auto Test feature, full set of selectable scale limits and thresholds, the FTE-8100 makes zeroing in on channel measurements easy.

Storable Test Configurations
File and recall testing configurations for later use.

Power/Gain Tilt
The Hand Held FTE-8100 offers high end features such as power tilt for DWDM channel equalization and gain tilt to adjust EDFA gain flatness.

Information Display
For flexibility the channel numbers are selected in wavelength or frequency and the information is displayed in graph or table mode

Onboard File Storage
There is file storage for up to 1000 tests that may be downloaded to a PC and viewed with supplied CertSoft reporting software.
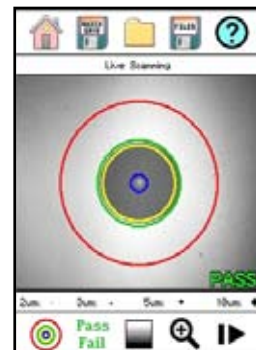
Features:

- 88 Channel DWDM Testing
- Available for CWDM Channels
- Integrated Video Inspection System
- 4" Color Touch Screen
- Selectable First Channel Setting
- 50 or 100 GHz DWDM Channel Spacing
- Pass/Fail Thresholds and Drift Stats
- Fast <1/2 Second Update
- Bar Graph and Table Modes
- Auto Test Zooms in on Active Channels
- Interchangeable Fiber Optic Connectors
- Storable Parameter Settings
- Solid State Optics-No Moving Parts
- Easy Operation with Help Mode
- 6 hr Battery Life
- Impact Resistant Boot
- USB/PC Ports

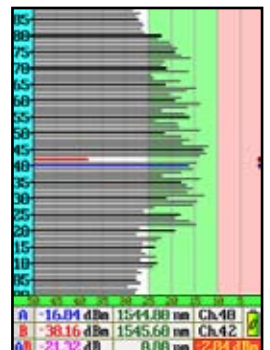# FTE-8100 Specification

Specifications

Wavelength Range	C-Band 1530 -1561nm (196.0 THz - 192.0THz) CWDM 1310, 1471-1611nm
Channel Spacing	50GHz, 100GHz (CWDM 20nm)
Wavelength Accuracy	±0.1nm
Channel Power Range	+10dBm to -50dBm
Absolute Accuracy	±1 dB
Max Composite Power	+28 dBm
PDL	±0.15dB
Optical Rejection Ratio	40dBc (@50GHz)
Measurement Time	< 1/2 Second
Readout Resolution	0.01dB
Return Loss	>40dB

General

Optical Interface	Universal UPC (FC/SC)
Graphical Display	Bar Graph and Table View
Display	4 in Touch Color TFT
Dimensions with Protective Boot	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.8 lbs
Battery	Rechargeable NiMH - 6 hours operating time
Power	Input 100-240VAC, 50-60Hz, 0.3A, Output 9V, 0.67A
Environmental	Operation -10°C to 50°C
Accessories Included	Universal power supply with mains for US, UK, CE and AU. Interchangeable FC and SC adapters, CertSoft software suite and manual on CD, USB cable and rubber boot

Specifications are subject to change without notice:

Video Inspection System with IEC61300-3-35 pass/fail grading zone system

Main DWDM Scan Screen with 88 Channel Displayed

Ordering Information

FTE-8100C	C-Band Optical Spectrum Analyzer
FTE-8100CWDM	9 Channel CWDM Channel Analyzer
VIS-300	TTI Video Probe

Made in the USA

FTE-8000-CWDM Channel Analyzer

Fast Scan
The FTE-8000-CWDM Channel Analyzer Displays a full scan of all 18 channels on the ITU grid twice a second.

Onboard Help System
Use the onboard help text for a quick guide to the functions and features available on the FTE8000-CWDM.

Auto Test Button
With its one button Auto Test feature, and a full set of selectable scale limits and thresholds, the FTE-8000-CWDM makes zeroing in on channel measurements easy.

Simple to Use
The FTE8000-CWDM is designed for simple operation and is suited for field or lab use.

Power Tilt
The FTE-8000CWDM offers a Power Tilt feature for CWDM channel equalization.

Information Display
For flexibility the channel numbers are selected in wavelength or frequency and the information is displayed in graph or table mode

Onboard and External File Storage
There is file storage for up to 1000 scans that may be downloaded to a flash drive or directly to the PC using the supplied CertSoft software suite.

Pass/Fail Thresholds
The unit allows users to set Pass/Fail thresholds that are displayed on the main graphical display by a highlighted background. Failed channels fall outside the highlighted area and in the table view failed channels are displayed in red.
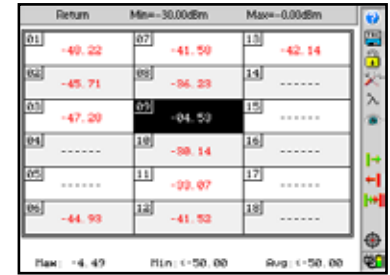
Integrated Video Inspection
Ensure accurate test and protect equipment from damage, by inspecting connectors with the integrated video inspection system. Connector images may be stored, allowing users to include them with test documents.

Features:

- Available in 18 or 9 Channel Models
- Pass/Fail Thresholds and Drift Stats
- Fast <1/2 second Update
- Onboard Video Scope
- Bar Graph and Table Displays
- Auto Test Zooms in on Active Channels
- Interchangeable Fiber Optic Connectors
- Rugged Case w/Impact Resistant Boot
- Solid State Optics-No Moving Parts
- Easy Operation with Help Mode
- 4" Color Display
- 8hr Battery Life
- Stores 1000 test
- USB/PC and USB Flash ports

Made in the USA

FTE-8000-CWDM Specifications

Table View

In the table view, the FTE-8000-CWDM displays failed channels in red and when a channel is highlighted, statistical information is displayed including the minimum, maximum and average power levels.

Specifications

Wavelength Range	1271-1611nm
Channel Spacing	20nm
Channel Pass Band	±6.5nm
Channel Power Range	+5dBm to -50dBm
Absolute Accuracy	±1 dB
Max Composite Power	+23dBm
PDL	±0.2dB
Adjacent Channel Isolation	30dB
Measurement Time	< 1/2 Second
Readout Resolution	0.01dB
Return Loss	>40dB
Optical Interface	Universal UPC (FC/SC)
Graphical Display	Bar Graph and Table View
Display	4 in Color TFT
Dimensions W/O Boot	7.75 x 4.5 x 2.25 inches
Weight	2 lbs
Battery	Rechargeable NiMH - 8 hours operating time
Power	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Environmental	Operation -10°C to 50°C
Accessories Included	Universal power supply with mains for US, UK, CE and AU. Interchangeable FC and SC adapters, CertSoft Reporting software, USB cable, manual on CD and rubber boot

Specifications are subject to change without notice:

Graphical View

The FTE-8000-CWDM graph display can be configured to optimize the test view. The user can zoom in on specific channels, mark the display area in which channels meet power criteria and even limit the number of overall channels viewed.

We also offer the FTE8000-C or - L DWDM handheld optical spectrum Analyzer for DWDM network testing applications

Video Scope

The FTE-8000-CWDM will accommodate the CI-1100 video probe allowing the user to visually check connectors for cleanliness and damage prior to testing. This helps eliminate costly repairs to the fiber optic connects on the FTE-8000 -CWDM and results in more accurate tests.

Ordering Information

FTE-8000CWDM	18 Channel CWDM Analyzer
FTE-SCASE-LG	Soft Case for FTE-6000, 7500 and 8000 Series
CI-1100	Video Probe

Made in the USA

FTE-6000 Tunable Laser Source

Hand Held Tunable Laser Source

The TLS is available in C and L Bands with up to 88 channels on the ITU Grid at channel Spacing down to 50 GHz.

Onboard help system

Use the onboard help text for a quick guide to the functions and features available on the FTE-6000

TLS Display

The TLS displays output power and wavelength, frequency or ITU channel on a bright 4" color display.

Simple to Use

It is designed for simple operation and is suited for field or lab use. The user has he ability to set your step size, power level, dwell time and whether the sweep is to move up or down the scale.

Start-UP

The FTE-6000 offers a fast start up with minimal warm up and provides stable wavelength and power outputs.

Virtual Instrument

The supplied CertSoft software suit virtual instrument feature may be used to operate the unit via PC.

Rugged

The FTE-6000 is manufactured in our rugged splash proof housing with a highly protective boot.

Features:

- Selectable Step Size Down to 50 GHz
- Selectable Start & Stop Channels
- Displays in Wavelength or Frequency
- Selectable Dwell Time
- Available in C or L Band
- Rugged Case with Impact Resistant Boot
- USB PC Interface with Remote Operation
- Battery Operated or International Line Voltage
- Simple Operation with onboard Help Mode
- Lowest Cost Hand Held Tunable Laser Source
- Interchangeable Fiber Optic Connectors
- Up to 88 Channels on the ITU Grid
- Fast Turn-On
- 4" Color Display
- 4 hr. Battery Life

Made in the USA

FTE-6000 Specifications

Frequency Range	FTE-6000 C 192 - 196 THz (1529-1563nm) FTE-6000 L 187 - 191 THz (1569-1607nm)
Accuracy	1.5 GHz
Line Width	1 MHz
Side Mode Suppression Ration	45 dB
Output Power Range	+8 dBm to +14 dBm C Band +5 dBm to +11 dBm C Band
Power Setting Resolution	0.01 dB
Power Variation over Wavelength Range	+0.4 Max. +0.2 Typ.
Minimum Channel Spacing	50 GHz (0.4nm)
Fiber Type	9/125 μm
Relative Intensity Noise	-100 dB/Hz 10MHz - 1 GHz -140 dB/Hz 1 GHz 10 GHz
Graphical Display	4 in Color TFT
Dimensions	7.75 x 4.5 x 2.25 inches
Weight	2 lbs
Battery	Rechargeable NiMH - 4 hours operating time
Power	Input 100-240VAC, 47-63Hz, 0.4A, Output 13.6V, 0.57A
Environmental	Operation -10°C to + 40°C
Accessories Included	Universal power supply with mains for US, UK, CE and AU. Interchangeable FC and SC adaptors, CertSoft VI Software, USB Cable, Manual on CD and Rubber Boot

Specifications are subject to change without notice:

The FTE-6000 Tunable Light Source, can conducted sweeps of the ITU grid. Optimize the test procedures by setting the beginning and ending wavelengths, step size, power level, dwell time and direction of the sweep.
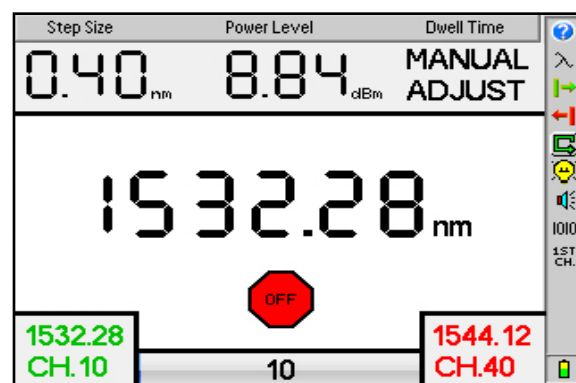
Ordering Information

FTE-6000C	C-Band Tunable Laser Source
FTE-6000L	L-Band Tunable Laser Source
CI-1100	Video Scope Inspection Probe
FTE-SCASE-LG	Soft Case for FTE-6000, 7500 and 8000 Series

Made in the USA

FTE-5100 Fiber Optic Video Scope

Features:

- Interchangeable Adapters
- Digital Zoom
- USB Port for Connection to PC
- 8 Hour Battery Life
- IEC61300-3-35 Pass/Fail Grading System
- 150X and 300X Representation
- Position Image for Best Viewing
- Stores Connector Images
- Use with TTI CertSoft Software Suite
- Protective Rubber Boot with Stand
- Shipped with Universal AC Adapter
- Wide Range of Adapters Available
- One Hand Operation
- 4" TFT Display
- VIS-300 Probe is Compatible with the FTE1700 and FTE7000A

Specifications

Display	4 in Color TFT
Magnification	150X and 300X approx.
Power	Input 100-240VAC, 50-60Hz, 0.3A, Output 9V, 0.67A
Battery Type	Rechargeable NiMH 8 Hours Operating time
Operating Temp	-10°C to +40°C
Dimensions w/Boot	8.62" L x 4.25" W x 2.375" H

Specification are Subject to Change Without Notice

The FTE5100 has a Pass/Fail grading system with images that can be stored and recalled. Stored images may be associated with OTDR trace files to produce complete professional reports that include the OTDR trace, along with connector image and LTS results. The FTE5100 is indispensable for testing connectors end face prior to connecting to expensive optical test equipment. This helps ensure accurate measurements and also helps protect equipment from damage caused by contaminated connectors. It is also essential to have clean connectors to ensure networks operate at properly. The VIS-300 probe may be purchased separately and used with other FTE series equipment. The VIS-300 has a full range of tips available.

Ordering Information

FTE-5100	Video Inspection System
VIS-300	Video Probe

Kit Contents

The FTE-5100 Kit includes Probe, LCD Scope Unit, AC wall adapter, 2.5mm patch cord tip, USB Cable, Manual on CD and PC Software

Made in the USA

FTE-4000 Variable Optical Attenuator

SPECIFICATIONS

Attenuation Range	FTE-4000-4 2 to 40dB FTE-4000-8 4 to 80dB
Wavelengths	1310 and 1550 nm
Resolution	.01 dB
Uncertainty	+/- 0.5 dB
Repeatability	+/- 0.1 dB
Insertion Loss	<2 dB (<4dB FTE-4000-8)
Return Loss	50 dB
Max Input Power	27 dBm
Graphical Display	4 in Color TFT
Dimensions w/Boot	8.62" L x 4.25" W x 2.375" H (219mm L x 108mm W x 60mm H)
Weight	1.6 lbs
Battery	Rechargeable NiMH - 6 hours operating time
Power	100-240 universal US, GB, EU, AU Mains
Environmental	Operation -10°C to + 40°C
Accessories Included	Universal power supply. FC and SC adaptors, Windows TM Compatible Software, USB Cable and Manual

Specification are Subject to Change Without Notice

TTI Hand Held Variable Optical Attenuator

The FTE-4000 is available with 40 dB or 80 dB attenuation levels.

Onboard Help System

As with all of our advanced test equipment the VOA has an onboard help feature.

Applications

The FTE-4000 can assist in the testing of system budget compliance, balancing transmitter power and adjusting receiver attenuation settings.

Built-In Output Power Monitor

The built-in output power monitor assists in setting appropriate attenuations levels.

Sweep Mode

The sweep mode can produce attenuation levels across a selected range.

Rugged

The FTE-4000 is manufactured in our rugged splash proof housing with a highly protective boot.

Features:

- **Up to 80 dB Attenuation**
- **Built in Output Power Monitor**
- **Typical Insertion Loss <2dB**
- **Adjustable Step Sizes**
- **USB PC Interface w/Remote Operation**
- **Absolute/Relative Attenuation Settings**
- **Calibrated at 1310/1550**
- **Rugged Case with Protective Rubber Boot**
- **Lowest Cost Hand Held VOA**
- **4" Color Display**

Made in the USA

1500 Series Loss Test Set

Features:

- Automated loss measurements
- Auto wavelength switching
- Up to three Wavelengths in one source
- Interchangeable Power Meter adapters
- Interchangeable Light Source adapters
- Power Meter with 80+ dB Dynamic Range
- Single port laser source
- Storage for 2000 Multi Wave Tests
- Rechargeable Li polymer 9V battery
- USB interface
- Free CertSoft Reporting Software Suite

Flexible Configuration
The 1500 is available as a Loss Test Set or as a stand alone Power Meter and Light Source in dual and triple wave configurations

InGaAs Power Meter
InGaAs based optical power meter calibrated at six wavelengths with a +5 to -77 dBm measurement range.

Auto Test
In the Autotest mode, the master unit (light source) changes wavelengths at a fixed rate and informs the slave unit (power meter) of the wavelength being transmitted.

Auto Wavelength Recognition
The power meter recognizes the wavelength being tested to help eliminate costly errors.

Available Wavelengths
The stabilized laser light source may have up to three wavelengths and the power meter is calibrated at 850, 1300, 1310, 1490 and 1550nm and 1625nm.

Small Size and Rugged
The 1500 Series is built into a very small package that is rugged and lightweight.

Fiber Identification
The units also performs fiber identification functions with modulation frequencies of 270, 1000 and 2000 Hz.

Power Options
Power by a rechargeable lithium polymer battery or in a pinch, any common 9V alkaline battery.

Test Storage
Store up to 2000 three wavelength tests and downloads the information to your PC via USB with the supplied CertSoft software suite

Available as Loss Test Sets or as Power Meter and Light Source Kits

TERAHERTZ TECHNOLOGIES INC.   WWW.TERATEC.US

Made in the USA

1500 Series Specifications

Power Meter

Power Meter Detector Type	InGaAs
Measurement Range	+5 dBm to - 77 dBm (CATV +25 dBm to -57dBm)
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm
Units of Measurement	dBm, dB,
Resolution	0.01dB
Power Measurement Uncertainty	± 0.18 dB under reference conditions, ± 0.25 dB from 0 to -65 dBm, ± 0.35 dB from 0 to +5 dBm and from -65 to -77 dBm
Auto Test Range	0 to -40 dB
Storage Locations	2000

Light Source

Laser Output Power	≥-1.000 dBm
Output Stability	± .05 dB / 24 hrs. @ constant temp,, ± .02 dB/C temperature coefficient
Laser Wavelengths	850, 1300, 1310, 1490, 1550 nm (± 20 nm)
Modulation Modes	CW, 270 Hz, 1000 Hz, 2000 Hz
Laser Safety Classification	Class I safety per FDA/CDRH and IEC-825-1 regulation

General

Display	LCD, power reading, 0.4" high digits, .01 dB resolution Power meter, laser wavelength display 0.16" high digits
Battery/Operating Time	Rechargeable Li Polymer/approximately fifteen hours following a full charge (power meter only approx. twenty hours)
Power Supply / Charger	Universal, US, UK, Continental Europe, and Australian Plugs Included
Power Requirements	95-260 VAC, 50-60 Hz, 3 VA Max
Operating Temp. Range	-10 to 40 C
Storage Temp. Range	Equipment -10 to 60C - Battery-10 to 40 C
Dimensions (with boot)	5.9" L x 3.9" W x 1.37" H (150mm L x 100mm W x 35mm H)
Weight	0.52 Kg
Accessories Provided	FC, ST, SC, 1.25 univ. and 2.5mm univ. PM adaptors, FC,SC and ST LS adapters, rubber boot, battery, power supply/charger, manual and software on CD, USB cable

TTI reserves the right to change specifications without notice

Ordering Information

PM-1500	Auto Wave Power Meter 5 dBm to - 77 dBm	PM-1500C	CATV Auto Wave Power Meter +25 dBm to -57dBm

Loss Test Set		Light Source	
LTS-1500-813	Loss Test Set with 850/1300nm Light Source	LS-1500-813	850/1300nm Multi-Mode Light Source
LTS-1500-35	Loss Test Set with 1310/1550nm Light Source	LS-1500-35	1310/1550nm Singlemode Light Source
LTS-1500-345	Loss Test Set with 1310/1490/1550nm LS	LS-1500-345	1310/1490/1550nm Singlemode LS

For Loss Test Set, add a "C" for CATV Power Meter. Ex: LTS-1500C-35

Made in the USA

VFL-280 Visual Fault Locator

Features:

- **Universal 2.5 mm Adapter**
- **Modulated Mode**
- **Standard AA Batteries**
- **>100 Hour Battery Life**
- **MM and SM Applications**
- **Compact Size**

TTI VFL-280 Visual Fault Locator

This is an easy to use piece of equipment that allows the precise location of breaks or severe micro bends in a fiber or cable under test by visually checking fiber for leaks of visible light.

Find Poor Splices

Use the VFL to find leaky splices or connectors within a patch panel or breaks within the dead zone of an OTDR

Small Size

Just a little wider and taller than a credit card, weighing just over 4 ounces.

Battery powered

Over 100 hours of operation on 2 AA alkaline batteries

Universal Adapter

Shipped with a universal 2.5mm adapter

Fiber Identification

Use the VFL to identify fibers in multi-fiber cables suitable for both singlemode and multimode fibers

Power Save feature

The VFL-280 has an over ridable power saver feature that powers down the unit after 30 minutes.

Specifications

Output Power	1mW max
Wavelength	650 nm +/- 5nm
Pulse Rate	6 Hz
Emission Indicator	LED
Standard F/O Connector	Universal 2.5 mm
Duty Cycle	50%
Battery	2 (AA) Alkaline
Battery Life	>100 hrs.
Size	4.0" L x 2.5" W x 1.1" D
Weight	4.2 oz.
Operating Temperature	-10 to 50 C
Storage Temperature	30 to 60 C
Auto Shut-Off	30 Min.

Specification are Subject to Change Without Notice

Made in the USA