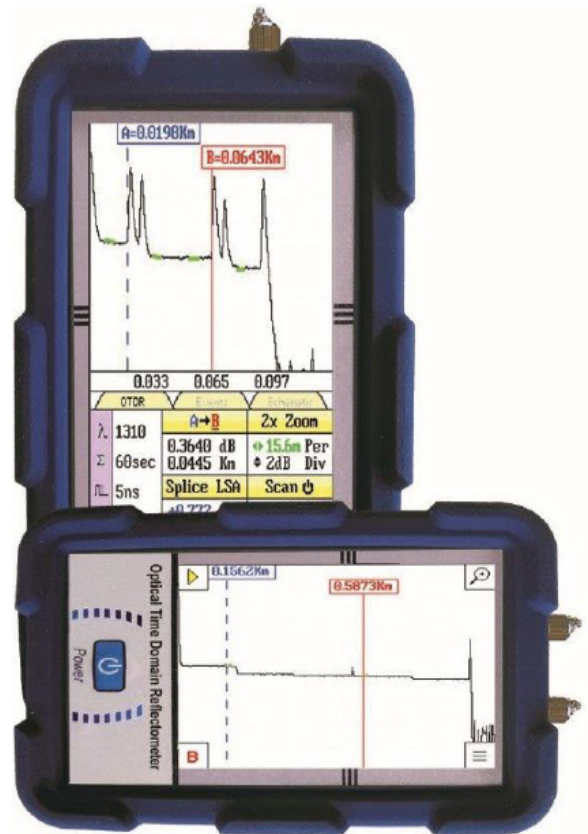


# FTE-7100

## Features:

- 33 dB Dynamic Range W/1 Meter Dead Zone
- Touch Screen
- Video Scope With Auto Pass/Fail Option
- VFL & Power Meter Options
- Bluetooth Android Tablet Operation
- Fib-R-Map Event Analyzer
- Macro Bend and Bidirectional Analysis
- Full Auto, Construction and Expert Modes
- SM, MM, Triple, Quad & CWDM Units Available
- Instant On, Immediate Scan
- Live Fiber Detection



## Optical Time Domain Reflectometer

**Advanced features in a small package:** The MICROTDR series is the smallest full-featured color touchscreen OTDR on the market. This unit includes all the features expected in today's hand held OTDR and more: bright color touch screen, project management, file storage, Fib-R-Map schematic event analysis, pass/fail threshold settings and onboard context-sensitive Express Help system to keep the learning curve as short as possible.

**Easy-to-use:** The MICROTDR is a user-friendly touch screen unit with a bright color display and automatic screen rotation for portrait or landscape trace viewing. It operates in simple fault finder mode, construction or expert modes.

**Powerful and customizable:** When equipped with the optional video scope, it is a powerful video inspection system with IEC61300-3-35 auto pass/fail capabilities. Additional optional features include a broadband power meter and visual fault locator. The MICROTDR is available in SM or MM dual wavelength configuration or as a SM/MM or CWDM Quad wavelength versions.

**Bluetooth compatible with Real-Time functionality:** The OTDR is operated/charged with a standard 5V USB charging system, or use the USB cable to connect the OTDR to a laptop for full real-time operation on Windows™. It can also be operated via Bluetooth™ with a compatible Android phone or tablet.



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Made In the USA

# FTE-7100 OTDR

<b>Specifications</b>	
Wavelength	850, 1300, 1310, 1550 and 1625 ±20nm (CWDM Wavelengths 1471-1611nm ±3nm)
Dynamic Range	26/27dB MM, 33/33dB SM, (1310/1550/1625 PON 37/38/38dB) (CWDM wavelengths 35dB)
Pulse Width	5 - 20,000 ns
Units of Measurement	km, ft, 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	0.25-64km MM, 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	~40,000
Memory Type	Internal
Power Supply / Charger	Universal
Battery	Li-ion 6hr typ.
Storage Temperature	-20 to 60 C
Operating Temperature Range	-10 to 50 C
Dimensions (w/out rubber boot )	6.25" L x 4.125" W x 1.875" H (159mm L x 105mm W x 48mm H)
Weight	1.5 lbs (0.7 kg)
Communications ports	USB and Bluetooth
Connector Styles	Choice of FC, ST, SC
Accessories Provided	Universal Power Adapter w/US, UK, Continental Europe, and Australian Plugs, Choice of FC/ST and SC Adapters, Android Application, Windows Compatible Software, Rubber Boot and Manual on CD

*TTI reserves the right to change specifications without notice*

<b>Light Source</b>	
Fiber Type	Singlemode, Multimode
Wavelengths	850, 1300, 1310, 1490, 1550 and 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

<b>VFL (Option)</b>	
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.

## Laser Safety

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



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# FTE-7100 OTDR

Power Meter (Option)	
Detector Type	InGaAs
Connector Type	ST, FL, SC, 1.25mm and 2.5mm Interchangeable
Dynamic Range	+5 to -77dB (CATV - +25 to -57dB)
Calibrated Wavelengths	850,1300,1310,1490,1550 and 1625nm
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
Units of Measurement	dBm, dB
Resolution	.01 dB

Ordering Information	
FTE-7100-1315	1310/1550nm Dual Wavelength MICROTDR
FTE-7100-8513	850/1300nm Dual Wavelength MICROTDR
FTE-7100-QUAD	850/1300/1310/1550nm QUAD Wave MICROTDR
FTE-7100-PON	1310/1550nm with 1625nm Active PON MICROTDR
FTE-7100-CWDM-CL	1551/1571/1591/1611nm QUAD Wavelength MICROTDR
FTE-7100-CWDM-S	1471/1491/1511/1531nm QUAD Wavelength MICROTDR

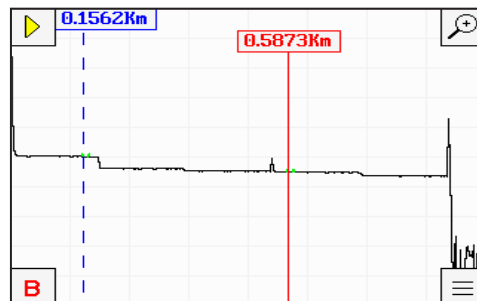
Configurable Options	
FTE-7100-VP	Video Scope with VIS-300 Video Probe Option
FTE-7100-PM	Power Meter Option
FTE-7100-VFL	Visible Fault Locator Option

## Additional Features

- Onboard Memory of ~40,000 traces
- CW / Fiber Identifier Light Source
- CertSoft Report Software
- Real Time System ORL

Range	1	4	16	64	256
Pulse W.	10	30	100	300	1k
Avg. (s)	◀	30	60	120	▶
Wave L.	850	1300	1310	1550	
D.Unit	Km	kf	mi		
P.W.Unit	Meters	Nanosec's			
Event Sense	Low	Medium	High		
IOR	1.468	ORL Thresh	60.0		
Loss Thresh	0.25	Link Thresh	12.5		
Date	June 2018				
Time	11:47				
	Return				

Parameter Settings Screen



Large Trace View

#	P	KM	SPLICE	2POINT	DB/KM	TYPE
1	P	0.3624	+0.511	0.151	+0.455	Splic
2	P	0.3797	+0.063	0.016	-NR-	Splic
3	P	0.7278	+0.596	0.113	+0.337	Splic
4	P	0.9085	+5.462	0.023	-0.140	-49.4
5	P	0.9885	Link	1.423	+1.589	32.44

The figure shows a trace analysis screen with a detailed view of the fiber trace. It includes three zoomed-in sections: a splice at 0.7278 km with a loss of +0.596 dB, an ORL (Optical Return Loss) at 0.9085 km with a value of -49.4 dB, and a link at 0.9885 km with a loss of 32.44 dB. The main trace shows the overall signal profile with these key events highlighted.

Trace Analysis Screen



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