## FTE-8100

## **Features:**

- Up To 98 Channels
- 50GHz or 100GHz Bar Graph or Table Mode
- 6GHz HiRes Line Graph Mode
- Auto Pass/Fail Video Inspection Scope Option
- PM and VFL Options Also Available
- Pass/Fail Thresholds
- 12 Hour Li-ion Battery Pack
- Fast Real Time with <1/2 second Update</li>
- Solid State Optics No Moving Parts
- Auto Test Mode Zooms in on Active Channels
- Rugged Case w/Impact Resistant Boot
- 4" Touch Color Display
- Stores up to 1000 tests
- USB/PC Port



## Hand Held Optical Spectrum/Channel Analyzer

The FTE-8100 Optical Spectrum Analyzer is one of the most rugged and affordable full featured Mini OSAs on the market. This C-band hand held OSA is available in up to 98 channels with 50 and 100 GHz channel spacing. The FTE-8100 is simple and fast to use with its touch screen operation and twice a second scan. It offers high end features such as power tilt monitoring for DWDM channel equalization.

With a full set of selectable scale limits and thresholds, the FTE-8100 makes zeroing in on channel measurements easy. For flexibility, the channel numbers are selected in wavelength or frequency. The information is displayed in graph, table or in 6GHz line graph mode, on the 4" bright color touch screen. This unit allows users to set pass/ fail thresholds and can store up to 1000 tests that can be downloaded via the USB PC port. Documentation is fast and easy with the included Cert-Soft certification software. The onboard Help system assists new users in parameter setup and file manipulation.

The FTE-8100 is available with an IEC61300-3-35 auto Pass/Fail video inspection scope, (probe sold separately) power meter or VFL options.



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Perahertz Han	d Held OSA Specification	-50 -45 -40 -35 -30 -25 -20 -15 -10
Wavelength Range	Channels 14 - 62.5 7 196.25THz - 191.4THz 1527.6 -1566.31nm	58.0 55.5 53.0 50.5 48.0
Channel Spacing	50GHz, 100GHz	45.5
Wavelength Accuracy	±0.1nm	40.5
Channel Power Ranges	Low Range Port  -50dBm to -10dBm, High Range Port -30dBm to +10dBm	
Absolute Accuracy	±1 dB	
Max Composite Power	+28 dBm	
PDL	±0.15dB	A -14.67 dBm 1548.91 nm ch 35   B -16.63 dBm 1550.91 nm ch 33
Optical Rejection Ratio	40dBc (@50GHz)	<u>AB – 1.96 dB 2.00 nm +0.00</u> Graphical View
Measurement Time	< 1/2 Second	
Readout Resolution	0.01dB	62.5 50.0 37.5 25.0
Return Loss	>40dB	62.0 -48.56 49.5 -46.14 37.0 -17.25 24.5 - 61.5 49.0 36.5 24.0 -
	General	61.0 -48.56 48.5 36.0 23.5   60.5 -48.88 48.0 -45.03 35.5 -14.31 23.0   60.0 47.5 35.0 22.5 -
Optical Interface	SC/APC or SC/APC	59.5 -47.42 47.0 34.5 -28.14 22.0   59.0 -48.87 46.5 -44.17 34.0 -17.97 21.5   58.5 -49.43 46.0 33.5 -48.59 21.0
Graphical Display	bar graph, table view and 6GHz Line Graph	58.0 -48.02 45.5 -41.94 63.0 -16.02 20.5 -   57.5 45.0 32.5 20.0 -
Display	4 in. touch color TFT	57.0 -48.98 44.5 32.0 19.5 -   56.5 44.0 -39.84 31.5 -16.48 19.0 -   56.0 43.5 31.0 18.5 -
Dimensions	7.62" L x 3.88" W x 1.56" H (194mm L x 99mm W x 40mm H	55.5 43.0 30.5 18.0   55.0 -47.77 42.5 -37.23 30.0 -28.96 17.5   54.5 -47.62 42.0 29.5 17.0 15.0   54.0 41.5 23.0 16.5 16.5
Weight	1.6 lbs.	53.5 -47.90 41.0 -32.71 28.5 -35.46 16.0   53.0 40.5 28.0 15.5   52.5 40.0 -28.30 27.5 -39.71 15.0
Battery	LI-ion 12 hrs. typ	52.0 -48.36 39.5 -33.05 27.0 -46.36 14.5 -   51.5 39.0 26.5 14.0 - - - 14.0 -
Power	100-240V input universal US, GB, EU, AU Mains, 15VDC Output	51.0 -46.07 38.5 -23.25 26.0 -42.82 50.5 38.0 25.5 Pow Min Max Avg
Operating Temperature	-10°C to 40°C	Table View with Pass/
Storage Temperature	-20°C to 60°C	Indication
Accessories Included	Universal power supply with mains for US, UK, EU and AU. ships with SC/APC or SC/UPC as ordered, CertSoft Software Suite, USB cable, manual and rubber boot with tethered stylus	View; Paused Press SCAN to continue
	Power Meter Specifications	
Detector Type	InGaAs	$\left( \bigcirc \right)$
Connector Type	2.5mm Interchangeable	
Dynamic Range	+5 to -77dB (CATV - +25 to -57dB)	
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm	
Power Measurement Un- certainty	± 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	2um: - 3um: - 5um: - 10um: Use LRUD to pan image
Units of Measurement	dBm, dB	IEC61300-3-35
Resolution	.01 dB	Auto Pass/Fail



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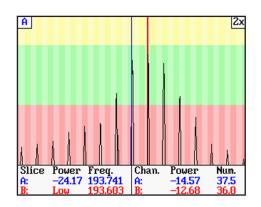


Visible Fault Locator		
Emitter Type	Laser	
Wavelength	650nm ±5nm	
Laser Safety Class	Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993	
Connector Type	2.5mm Universal	
Output Power	1mW Max.	

## **Visible Fault Locator**



TTI reserves the right to change specifications without notice



6 GHz Line Graph Mode with High, Low and Pass Threshold Indications

Ordering Information		
FTE-8100-C-A-VP	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/APC Adapters. Includes Video Inspection Port for use with the Video Inspection Probe (Sold Separately)	
FTE-8100-C-A-PM	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/APC Adapters. Includes Broadband Power Meter	
FTE-8100-C-A-VFL	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/APC Adapters. Includes Visual Fault Locator	
FTE-8100-C-U-VP	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/UPC Adapters. Includes Video Inspection Port for use with the Video Inspection Probe (Sold Separately)	
FTE-8100-C-U-PM	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/UPC Adapters. Includes Broadband Power Meter	
FTE-8100-C-U-VFL	98 Channel, C Band Hand Held Optical Spectrum Analyzer with SC/UPC Adapters. Includes Visual Fault Locator	
VIS-300	Video Inspection Probe	



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