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
- 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.



Terahertz Technologies Inc. 169 Clear Rd., Oriskany NY 13424 Toll Free: 888-U.S.- OTDRS Phone: 315-736-3642 Fax: 315-736-4078 sales@teratec.us www.teratec.us





| 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 |



Terahertz Technologies Inc. 169 Clear Rd., Oriskany NY 13424 Toll Free: 888-U.S.- OTDRS Phone: 315-736-3642 Fax: 315-736-4078 sales@teratec.us www.teratec.us



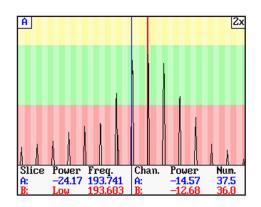


| Visible Fault Locator | | |
|-----------------------|---|--|
| Emitter Type | Laser | |
| Wavelength | 650nm ±5nm | |
| Laser Safety Class | Class IIFDA21 CFR1040.10 &1040.11 IEC 825-1: 1993 | |
| Connector Type | 2.5mm Universal | |
| Output Power | 1mW Max. | |

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 | |



Terahertz Technologies Inc. 169 Clear Rd., Oriskany NY 13424 Toll Free: 888-U.S.- OTDRS Phone: 315-736-3642 Fax: 315-736-4078 sales@teratec.us www.teratec.us



Made In the USA

TTI makes every effort to insure all statements and information for the products referred to in this document are accurate and reliable. TTI can not accept any responsibility for errors, omissions or miss statements, nor can they accept responsibility for any actions taken based on the information demonstrated herein. TTI reserves the right to make changes of any kind to the product referred to in this document without prior notice. © 3/2021 Terahertz Technologies Inc.