

DTX Fiber Modules Extended Specifications

| Optical Specifications ¹ | |
|---|---|
| Testing speed (worse case not including reference measurement) | - Far end source mode (1 λ): ≤ 4.5 s - Loopback mode (2 λ , 2 fibers, auto OLB and pass/fail): ≤ 5 s - Smart remote mode (2 λ , 2 fibers, auto OLB and pass/fail): ≤ 12 s - FindFiber mode: ≤ 3 s |
| Input/output (meter/source) connectors | SC/SC |
| Source type and nominal wavelength | DTX-MFM: 850 nm LED and 1300 nm LED DTX-SFM: 1310 nm FP laser and 1550 nm FP laser DTX-GFM: 850 nm VCEL and 1310 nm FP laser |
| Source wavelengths | DTX-MFM: 850 ± 30 nm, 1300 ± 20 nm DTX-SFM: 1310 ± 20 nm, 1550 ± 30 nm DTX-GFM: 850 ± 20 nm, 1310 ± 20 nm |
| Source spectral width (FWHM) | DTX-MFM: 30-60 nm at 850 nm, 100-140 nm at 1300 nm |
| Source power | DTX-MFM: ≥ -20 dBm at 850/1300 nm DTX-SFM: ≥ -7 dBm at 1310/1550 nm DTX-GFM: ≥ -7 dBm at 850/1300 nm |
| Source power stability² | DTX-MFM: ± 0.1 dB over 8 hours DTX-SFM: ± 0.25 dB over 8 hours DTX-GFM: ± 0.25 dB over 8 hours |
| Length measurement³ | DTX-MFM: 0-5,000 m of 62.5 or 50 μ m fiber DTX-SFM: 0-10,000 m of 9 μ m singlemode fiber DTX-GFM: 0-5,000 m of 62.5 OR 50 μ m fiber |
| Length measurement accuracy | ± 1.5 m $\pm 2\%$ of length |
| Propagation time accuracy | ± 15 ns $\pm 2\%$ of propagation time |
| Power meter type | InGaAs detector |
| Power meter calibrated wavelengths | 850 nm, 1310 nm, 1550 nm |
| Power measurement range | 0 to -60 dBm (1310 nm and 1550 nm) 0 to -52 dBm (850 nm) |
| Power measurement uncertainty⁴ (accuracy) | ± 0.25 dB |
| Measurement linearity | ± 0.1 dB ⁵ (1310 nm and 1550 nm) ± 0.2 dB ⁶ (850 nm) |
| Display resolution, dB or dBm μ W >400, >40, >4, >0.4, ≤ 0.4 | 0.01 1, 0.1, 0.01, 0.001, 0.0001 |
| Display update rate | 1 reading per second |
| Dynamic range (unit communications and length measurement) | DTX-MFM: ≥ 12 dB DTX-SFM: ≥ 22 dB DTX-GFM: ≥ 22 dB |
| Re-calibration period | 1 year |
| VFL Specifications | |
| Output power⁷ | ≤ 1.0 mW |
| Operating wavelength | 650 nm nominal |
| Output modes | Continuous wave and pulse mode |
| Connector adapter | 2.5 mm universal |
| Laser safety | Class II CDRH |



¹ At 23°C unless otherwise specified.

² After five-minute warm-up time.

³ In Loopback mode, length is total fiber length. In Smart remote mode, length is length between main and smart remote units.

⁴ Power level -20 dBm, continuous wave, 62.5/125 at 850 nm, 9/125 at 1310 and 1550 nm

⁵ For 1310 and 1550 nm, ± 0.1 dB from 0 to -55 dBm, ± 0.2 dB < -55 dBm

⁶ For 850 nm, ± 0.2 dB from 0 to -45 dBm, ± 0.25 dB < -45 dBm

⁷ Into SMF-28 singlemode fiber, continuous wave and pulse modes, SC/UPC connector

Above specifications are subject to change without notice

| Environmental Specifications | |
|---|--|
| Operating temperature | 0°C to 40°C |
| Storage temperature | -20°C to 60°C |
| Relative humidity (%RH operating without condensation) | 95% (10 to 35°C) 75% (35 to 40°C) uncontrolled < 10°C |
| Vibration | Random, 2 g, 5-500 Hz |
| Shock | 1 m drop onto all corners and faces, test cables not attached |
| Safety | CSA C22.2 No. 1010.1: 1992 EN 61010-1 1 st . Edition + Amendments 1, 2 CE |
| Altitude | 3000 m |
| EMC | EN 61326-1 |
| General Specifications | |
| Dimensions (L x W x D), nominal | 4.2 in x 3.0 in x 1.1 in (106 mm x 76 mm x 28 mm) |
| Weight, nominal | 0.31 lb (0.14 kg) |

NETWORK SUPERVISION

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Printed in U.S.A. 1/2005 2150170 D-ENG-N Rev B