DTX Fiber Modules Extended Specifications

Optical Specifications[1]	
Testing speed (worse case not including reference measurement)	- Far end source mode (1λ): ≤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 (Meter) connectors	Removeable adapter on fiber optic power meter (input port). Removable SC adapter standard with product. Optional removable adapters: LC, ST and FC
Output (Source) connectors	Fixed SC adapter
Source type and nominal wavelength	DTX-MFM2: 850 nm LED and 1300 nm LED DTX-SFM2: 1310 nm FP laser and 1550 nm FP laser DTX-GFM2: 850 nm VCSEL and 1310 nm FP laser
Source wavelengths	DTX-MFM2: 850 ±30 nm, 1300 ±20 nm DTX-SFM2: 1310 ±20 nm, 1550 ±30 nm DTX-GFM2: 850 ±20 nm, 1310 ±20 nm
Source spectral width (FWHM)	DTX-MFM2: 30-60 nm at 850 nm, 100-140 nm at 1300 nm
Source power	DTX-MFM2: ≥-20 dBm at 850/1300 nm DTX-SFM2: ≥-7 dBm at 1310/1550 nm DTX-GFM2: ≥-7 dBm at 850/1300 nm
Source power stability[2]	DTX-MFM2: ±0.1 dB over 8 hours DTX-SFM2: ±0.25 dB over 8 hours DTX-GFM2: ±0.25 dB over 8 hours
Length measurement[3]	DTX-MFM2: 0-5,000 m of 62.5 or 50 µm fiber DTX-SFM2: 0-10,000 m of 9 µm singlemode fiber DTX-GFM2: 0-5,000 m of 62.5 or 50 µm fiber
Length measurement accuracy	±1.5 m ±2% of length
Propagation time accuracy	±15 ns ±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 uncertainty[4] (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 µW >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-MFM2: ≥12 dB DTX-SFM2: ≥22 dB DTX-GFM2: ≥22 dB
Re-calibration period	1 year
VFL Specifications	
Output power[7]	≤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

Above specifications are subject to change without notice

[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

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 1st. Edition + Amendments 1, 2 CE
Altitude	3000 m
EMC	EN 61326-1
General Specifications	
Dimensions (L x W x D), nominal	106 mm x 76 mm x 28 mm (4.2 in x 3.0 in x 1.1 in)
Weight, nominal	0.14 kg (0.31 lb)

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