SPECIFICATIONS				
Optical characteristics	XTM-50 standard	XTM-50 ultrafine	XTM-50 O-band <sup>a</sup>	XTM-50 wide
Wavelength range (nm)	1450 to 1650	1480 to 1620	1260 to 1360	1525 to 1610
Wavelength resolution (pm) <sup>b</sup>	5	5	5	5
Minimum bandwidth (FWHM)	50 pm (6.25GHz)	32 pm (4 GHz)	50 pm (8 GHz)	50 pm (6.25 GHz)
Maximum bandwidth (FWHM)	950 pm (120 GHz)	650 pm (80 GHz)	900 pm (160 GHz)	5000 pm (625 GHz)
Bandwidth resolution	1 pm	1 pm	1 pm	0.3 % of FWHM typical
Filter edge gradient	500 dB/nm typical <sup>c</sup>	800 dB/nm typical	500 dB/nm typical <sup>c</sup>	500 dB/nm typical <sup>d</sup>
Insertion loss	5 dB (4.5 dB typical) e, f	5 dB (4.0 dB typical) <sup>f, g</sup>	5 dB (4.5 dB typical) f, h	5 dB (4.5 dB typical) i, j
Flatnes (dB)	0.2 <sup>k</sup>	0.2	0.3 <sup>m</sup>	0.2 <sup>n</sup>
Polarization dependent loss (dB)	±0.2 °	±0.2 <sup>g</sup>	±0.2 <sup>h</sup>	±0.2 <sup>i</sup>
Out-of-band suppression (crosstalk)	40 dB (60 dB typical) °	40 dB (50 dB typical) °	40 dB (60 dB typical) °	40 dB (45 dB typical) °
Interface				
Optical fiber type	SMF or PMF	SMF or PMF	SMF or PMF	SMF
Connector type	FC/PC or FC/APC			
Operating conditions				
Temperature range	15 °C to 35 °C (59 °F to 95 °F)			
Maximum optical input power (dBm)	30	30	30	27
Size				
Dimensions (W x D x H)	230 mm x 173 mm x 136 mm (9 in x 6.8 in x 5.35 in)			
Weight	2.2 kg (4.4 lbs)			

## Notes

- a. Specifications apply for wavelengths not equal to any water absorption line.
- b. Typical, related to user dexterity.
- c. From -3 dB and -40 dB for FWHM < 800 pm.
- d. Between -3 and -40 dB. Typically 550 dB/nm at FWHM =50 pm; 450 dB/nm at FWHM =1 nm; 225 dB/nm at FWHM =5 nm.
- e. From 1500 nm to 1600 nm and FWHM  $\geq$  100 pm.
- f. At lowest FWHM the insertion loss is 7 dB typical.
- g. From 1500 nm to 1600 nm and FWHM > 60 pm. h. From 1280 nm to 1340 nm and FWHM > 100 pm.
- i. For FWHM >100 pm.
- j. At lowest FWHM the insertion loss is < 7.0 dB.
- k. Centered width of FWHM-150 pm. For 150 pm < FWHM < 650 pm.
- l. Centered width of FWHM–100 pm. For 100 pm < FWHM < 500 pm.
- m. From 1280 nm to 1340 nm.
- n. Centered width of FWHM-150 pm. For 150 pm < FWHM < 2000 pm.
- o. Measured 1 nm away from the  $-3~\mathrm{dB}$  points.

