

## SPECIFICATIONS

Optical characteristics	XTA-50 Standard	XTA-50 Ultrafine	XTA-50 O-band <sup>a</sup>	XTA-50 Wide
Wavelength range (nm)	1450-1650	1480-1620	1260-1360	1525-1610
Wavelength resolution (pm)	1	1	1	1
Wavelength accuracy (pm) <sup>b</sup>	±30	±30	±30	±30
Wavelength tuning speed (s)	1	1	1	1
Minimum bandwidth (FWHM)	50 pm (6.25 GHz)	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 (pm)	1	1	1	1
Bandwidth tuning speed (s)	1	1	1	1
Filter edge roll-off (dB/nm)	500 (typical) <sup>c</sup>	800 (typical)	500 (typical) <sup>c</sup>	500 (typical) <sup>d</sup>
Insertion loss (dB)	5 (4.5 dB typical) <sup>e, f</sup>	5 (4.0 dB typical) <sup>f, g</sup>	5 (4.5 dB typical) <sup>f, h</sup>	5 (4.5 dB typical) <sup>i, j</sup>
Flatness (dB)	0.2 <sup>k</sup>	0.2 <sup>l</sup>	0.3 <sup>k, m</sup>	0.2 <sup>n</sup>
Polarization dependent loss (dB)	±0.2 <sup>e</sup>	±0.2 <sup>g</sup>	±0.2 <sup>h</sup>	±0.2 <sup>i</sup>
Out-of-band suppression (crosstalk) (dB)	40 (60 dB typical) <sup>o</sup>	40 (50 dB typical) <sup>o</sup>	40 (60 dB typical) <sup>o</sup>	40 (45 dB typical) <sup>o</sup>
<b>Interfaces</b>				
Display	7 inch resistive touch-screen (resolution 800 x 480)			
Communication interfaces	USB-B, Ethernet (x2), RS-232C, GPIB <sup>p</sup>			
Display and other interfaces	DVI-I (x1), USB 2.0-A (x4), PS/2 (x2)			
Optical fiber type	SMF or PMF			SMF
Connector type	FC/PC or FC/APC			
<b>Operating conditions</b>				
Temperature range	15 °C to 35 °C (59 °F to 95 °F)			
Maximum optical input power (dBm)	30			27
<b>Size</b>				
Dimensions (W x D x H)	254 x 385 x 154 mm (10 in x 15 1/8 in x 6 in)			
Weight	7 kg (15.4 lb)			

All specifications are given at 21±3°C after 30 minutes warm-up.

**Notes**

- Specifications apply for wavelengths not equal to any water absorption line.
- With "Backlash suppression" setting enabled.
- Between -3 and -40 dB for FWHM < 800 pm.
- 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.
- From 1500 nm to 1600 nm and FWHM > 100 pm.
- At lowest FWHM the insertion loss is 7 dB typical.
- From 1500 nm to 1600 nm and FWHM > 60 pm.
- From 1280 nm to 1340 nm and FWHM > 100 pm.
- For FWHM > 100 pm.
- At lowest FWHM the insertion loss is < 7.0 dB.
- Centered width of FWHM-150 pm. For 150 pm < FWHM < 650 pm.
- Centered width of FWHM-100 pm. For 100 pm < FWHM < 500 pm.
- From 1280 nm to 1340 nm.
- Centered width of FWHM-150 pm. For 150 pm < FWHM < 2000 pm.
- Measured 1 nm away from the -3 dB points.
- GPIB is supported as an option through an external RS-232/GPIB converter.