

Narrowband ASE Source - 1 μ m, C&L wavelength bands OEM module

Model no.: NBS



Description

This Narrowband ASE Source delivers a high spectral density output. Models with center wavelengths in the 1 μ m (such as 1064 nm) or 1.5 μ m - 1.6 μ m spectral regions are available. The design of the ASE Narrowband Source allows the emission spectral width to be tailored at the factory from a minimum FWHM value of 0.1 nm to a maximum FWHM value in excess of 20 nm (effectively becoming a broadband source for these larger spectral widths), while maintaining a spectral power density in the order of 1 mW/nm. In situations where a larger spectral power density is required, MWTechnologies can supply custom amplified versions.

Optical parameters (at 25°C)

Parameter	Specification	Unit
Center wavelength band	1 μ m, C-band or L-band	-
Spectral bandwidth (FWHM) ⁽¹⁾	0.1 – 20	nm
Output optical spectral power density	> 1 (for unamplified versions) > 20 (for amplified versions)	mW/nm
Output polarization extinction ratio ⁽²⁾	> 20	dB
Power stability (24h)	\pm 0.1	dB

Optical connections

Connector type	FC/APC, key width 2.02 mm
Polarization – output signal ⁽²⁾	Aligned with slow axis, fast axis is blocked

(1) Fixed, defined by customer

(2) For linearly polarized versions

Electrical parameters (at 25°C)

Parameter	Specification	Unit
External power supply	+5 VDC, 5A (not included)	-
Power consumption	< 25	W

Mechanical and environmental specifications

Parameter	Specification	Unit
Operating temperature range	10 – 55	C
Storage temperature range	-5 – 75	C
Dimensions (WxDxH)	120 x 90 x 25 (for unamplified versions) 160 x 110 x 25 (for amplified versions)	mm

Order Code: NBS-[WL]-[BW]-[PD]-[PL]

[WL] – center wavelength

10xx.x: Specify in the range 1030nm to 1070nm

1xxx.x: Specify in the range 1530nm to 1610nm

[BW] – FWHM spectral bandwidth

xx.x: Specify in nm

[PD] – UP for unamplified versions

AP for amplified versions

[PL] – PI for unpolarized versions

SPM for linearly polarized versions

Note: An optional external power supply module can be provided on request.