

Standard mode-selective spatial multiplexer for optical telecommunications



02/2021 - Cailabs reserves the right to modify the specifications without prior notice. Printed on PEFC™ certified paper (Programme for Endorsement of Forest Certification schemes).

Features

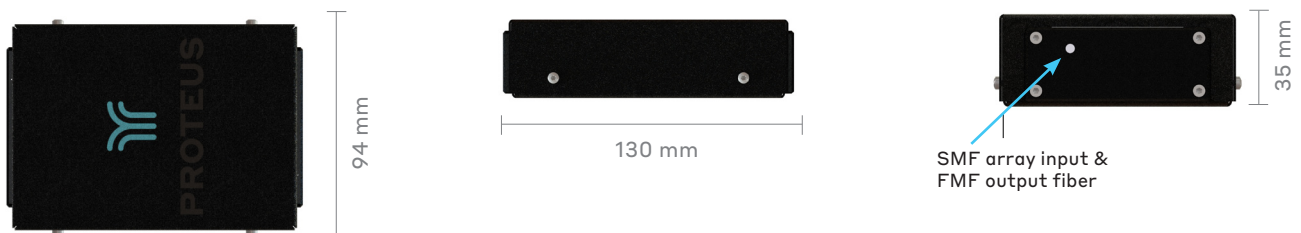
- › 6, 10 or 15 mode multiplexer
- › Operation over C-band (1550 nm)
- › Low insertion loss and high mode selectivity
- › Ultra compact design
- › Optimized for commercially available few-mode fibers

Description

- › Entry-level, standard design for research and development groups
- › Based on Cailabs' Multi-Plane Light Conversion* (MPLC) patented technology
- › Provides efficient multiplexing of 6, 10 or 15 spatial modes
- › Choice of commercially available, step-index or graded-index few-mode fibers manufactured by Prysmian and OFS, or 50/125 μm multimode fiber

General specifications

PARAMETER	PROTEUS-S-6		PROTEUS-S-10		PROTEUS-S-15	
	GUARANTEED VALUE (AT 20°C)	TYPICAL VALUES	GUARANTEED VALUE (AT 20°C)	TYPICAL VALUES	GUARANTEED VALUE (AT 20°C)	TYPICAL VALUES
Number of modes	6		10		15	
Wavelength of operation	C-band (optimized for 1550 nm)					
Back-to-back insertion loss	< 8 dB	< 6 dB	< 10 dB	< 9 dB	< 12 dB	< 10 dB
Back-to-back cross-talk	< -15 dB	-20 dB	< -12 dB	-18 dB	< -10 dB	< -16 dB
Signal input fiber type	SMF-28e+ array with LC/PC connectors					
Signal output fiber type	4 LP mode step-index fiber by Prysmian or graded-index by OFS, or 50/125 μm multimode fiber		6 LP mode graded-index fiber by Prysmian or 50/125 μm multimode fiber		50/125 μm multimode fiber	
Package size (mm)	130 x 94 x 35					



* U.S. Pat No 9.250.454 - Japanese patent n° 5990544