

Pioneering products for faster Internet

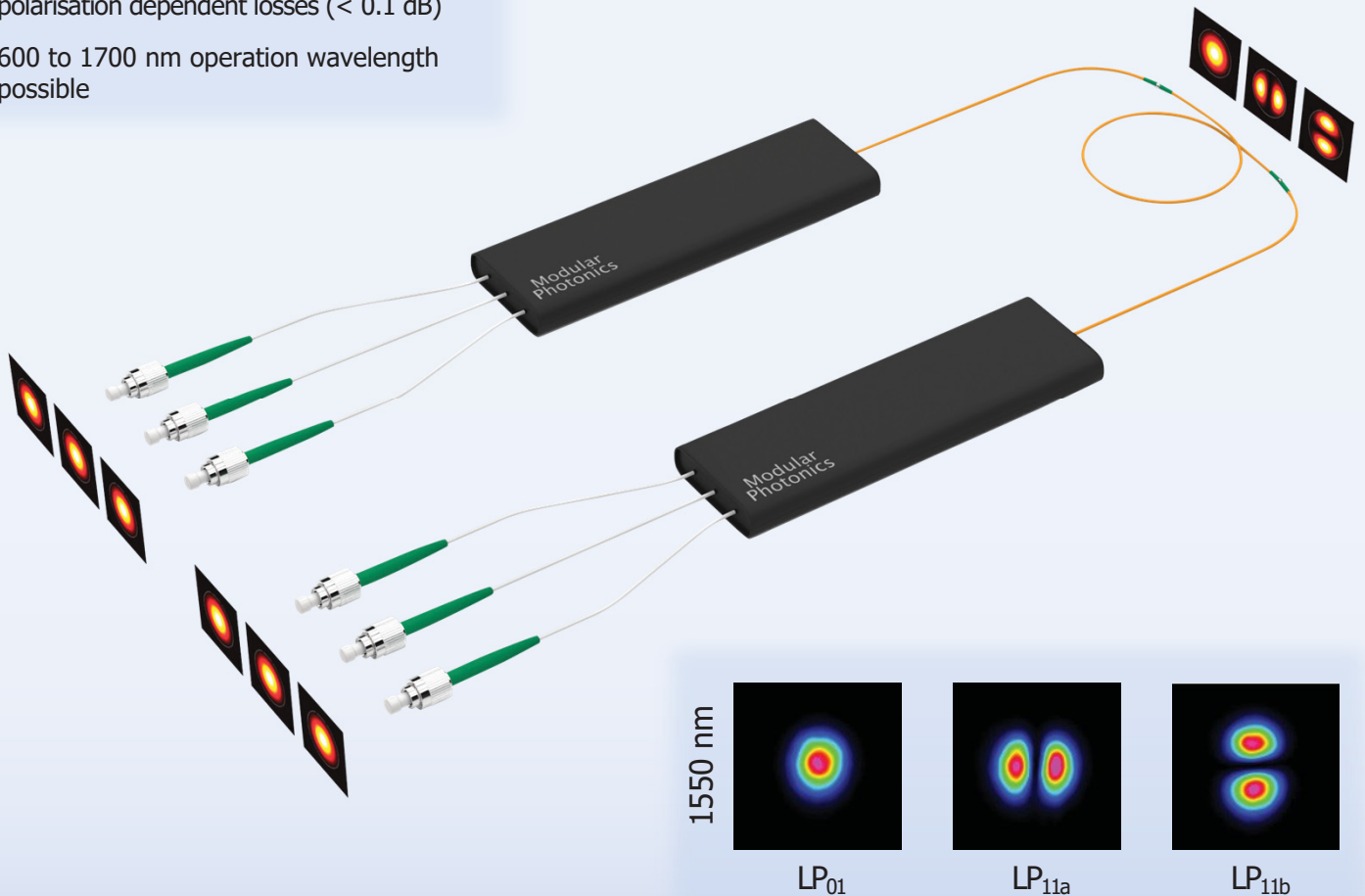
LPMUX3 Series

Key Features

- Compact integrated photonic solution
- Ultra-broadband operation (S+C+L telecommunication bands)
- Excellent mode-purity (≥ 18 dB mode-extinction ratios)
- Low insertion losses (≤ 2.0 dB) and low polarisation dependent losses (< 0.1 dB)
- 600 to 1700 nm operation wavelength possible

Applications

- Mode-division multiplexing
- Multi-parameter distributed fibre sensing



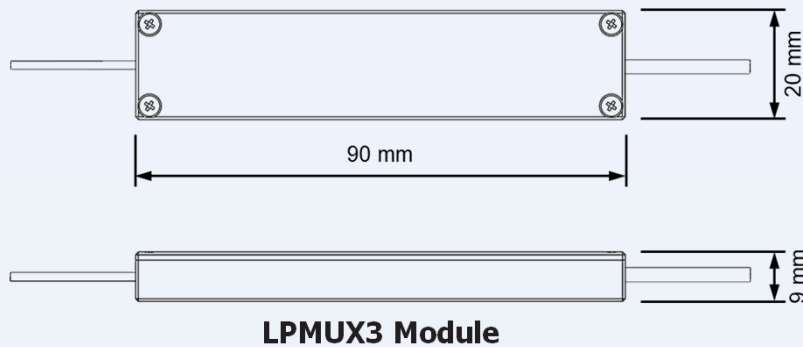
LPMUX3 - Mode-multiplexers

The LPMUX3 series of mode multiplexers allow for mode-selective excitation of the LP₀₁, LP_{11a} and LP_{11b} modes of a few-mode fibre with industry leading performance over ultra-broad wavelength ranges. The LPMUX3 series is ideal for research applications such as mode-division multiplexing and fibre sensing.

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Specifications

The LPMUX3 series are state-of-the-art mode multiplexers suitable for broadband mode multiplexing such as the entire S+C+L telecommunication bands.



Parameter	Value	Typical
† Operating wavelength	1450 – 1650 nm	–
1.* Insertion loss LP ₀₁	≤ 1.8 dB	1.4 dB
1.* Insertion loss LP _{11a}	≤ 2.0 dB	1.8 dB
1.* Insertion loss LP _{11b}	≤ 2.0 dB	1.8 dB
* Mode-extinction ratio LP _{11a}	≥ 18 dB	20 dB
* Mode-extinction ratio LP _{11b}	≥ 18 dB	20 dB
Single-mode connectors	SC/UPC or user-specified †	–
† Single-mode fibre length	> 1 m	–
Few-mode fibre type	OFS 2-Mode Graded Index	–
† Few-mode fibre termination	Bare fibre or user-specified connector †	–
† Few-mode fibre length	> 1 m	–
Maximum input power	300 mW	–
Package dimensions	90 x 20 x 9 mm	–
Operating temperature	-5 to 70 °C	–
Storage temperature	-50 to 85 °C	–

¹Enquire about custom orders. [†]Total insertion loss including connectors. ^{*}Specifications at 1550 nm.

Part Ordering

