

WAVELENGTH DIVISION MULTIPLEXING

WDM Hybrid Isolator

Combined WDM and isolator for EDFA pump paths, with up to 44 dB isolation in a dual-stage build.



Key Features

- WDM and isolator combined in one package
- Isolation ≥ 44 dB in the dual-stage configuration
- Signal path 1528 nm to 1565 nm (C band)
- Pump ports at 950–1010 nm or 1450–1490 nm
- Signal insertion loss ≤ 0.9 dB dual-stage

Applications

- EDFA input and pump combining stages
- Raman amplifier pump injection
- Amplifier subassemblies where splice count matters
- Protecting pump lasers from back reflection

Overview

This device combines a pump/signal WDM and an optical isolator in one package, which is exactly the combination an erbium-doped fiber amplifier needs at its input. Doing it in a single component removes a splice pair and the loss that goes with it.

The signal path covers the C band, 1528 nm to 1565 nm, and the pump port accepts either 950–1010 nm or 1450–1490 nm pumps. Signal insertion loss is 0.9 dB in the dual-stage build, with pump loss at 0.6 dB. Isolation is 30 dB single-stage or 44 dB dual-stage.

Specifications

Optical Performance

PARAMETER	VALUE	UNIT	CONDITIONS
Signal Wavelength	1528 – 1565	nm	C band
Pump Wavelength	950 – 1010 / 1450 – 1490	nm	
Signal Insertion Loss	≤ 0.9	dB	Dual-stage
Pump Insertion Loss	≤ 0.6	dB	
Isolation	≥ 30	dB	Single-stage
Isolation	≥ 44	dB	Dual-stage

Order or request a quote

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