



L-020 WDM

Dual WDM Module

Optelian's L-020 Dual Wavelength Division Multiplexing (WDM) module is a passive, wideband, dual-port, bidirectional multiplexing and demultiplexing module that integrates 1310 nm and 1550 nm optical signals onto a common optical fiber.

LightMUX



Common Optical Specifications

Parameter	Condition	Minimum	Nominal	Maximum
Center wavelength 1310 ports			1310 nm	
Center wavelength 1550 ports			1550 nm	
Passband width	-0.5 dB	+/- 20 nm		
Polarization dependent loss	All channels			0.1 dB
Insertion loss	All channels			1.0 dB
Channel isolation 1550 nm on 1310 port		45 dB		
Channel isolation 1310 nm on 1550 port		45 dB		
Optical return loss	All ports	35 dB		

General Specifications

Parameter	Minimum	Maximum
Operating temperature range	-40 °C (-40 °F)	65 °C (149 °F)
Storage temperature range	-40 °C (-40 °F)	85 °C (185 °F)
Relative non-condensing humidity	5%	95%
Optical input power		20 dBm

Mechanical Specifications

Parameter	Specification
Dimensions (H x W x D)	13 x 2.8 x 17 cm (5.1 x 1.1 x 6.7 in.)
Weight	0.2 kg (0.5 lb)
Optical Connector	SC/PC

Applications

The L-020 Dual WDM module can be used in either a bidirectional or unidirectional configuration. The module is designed to provide high isolation with low loss. In the unidirectional application, the 1310 nm and 1550 nm signals travel in the same direction on the single fiber connected to the COM port. Light from the two wavelength-specific ports is coupled and directed onto the COM port (refer to Figure 1). In the bi-directional application, light from the 1310 nm source travels in one direction, while light from the 1550 nm source travels in the opposite direction on the single fiber connected to COM (refer to Figure 2).

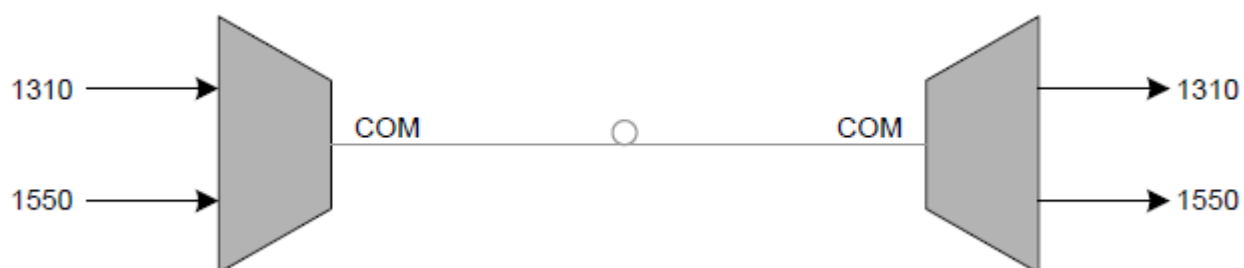


Figure 1: Unidirectional Application

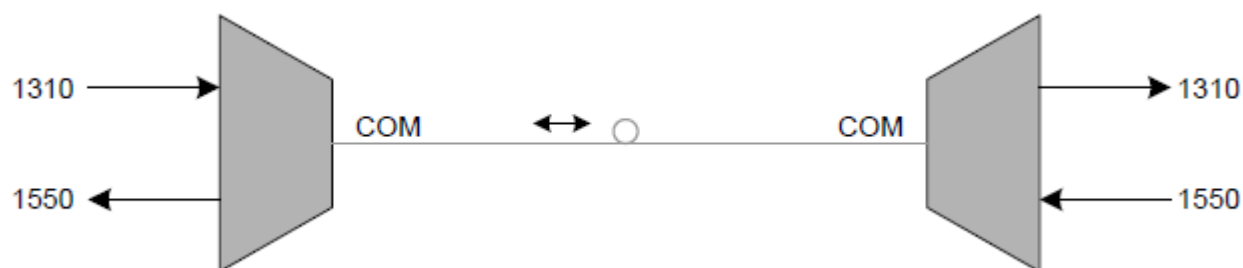


Figure 2: Bidirectional Application

Ordering Information

Model Number	Part Number	Description
L-020	100-020-000	L-020 Dual WDM Module