DWDM MUX AND DEMUX (Red21-28) (Blue 51-58) 1U RACK 8CH WITH 2 LGX BOX BIDI SINGLE FIBER

DWDM MUX AND DEMUX (Red21-28) (Blue 51-58) 1U RACK 8CH WITH 2 LGX BOX BIDI SINGLE

Variants

8CH (Red21-28) (Blue 51-58)

Details

The **8 Channel DWDM MUX / DEMUX (BiDi)** is a high-performance **Dense Wavelength Division Multiplexing (DWDM)** system designed to combine and separate multiple optical wavelengths over a single optical fiber using bidirectional (BiDi) transmission. It supports **8 DWDM channels** distributed across two wavelength groups: **Red Channels 21–28** and **Blue Channels 51–58**, maximizing fiber utilization while reducing infrastructure costs.

Housed in a standard **1U 19-inch rack-mount chassis**, the unit includes **2 LGX fiber modules (boxes)** for organized fiber management and easy installation. As a fully passive optical device, it requires no external power, offering excellent reliability, minimal maintenance, and long-term stable performance for telecom operators, ISPs, enterprise backbone networks, and data centers.

DWDM Channels

8CH

Transmission

BiDi

Rack Size

1U

Fiber Modules

2 LGX

Key Features

? 8 Channel DWDM Multiplexer / Demultiplexer

? Supports Bidirectional (BiDi) Single Fiber Transmission

? ITU-T DWDM Grid Channels (Red 21–28 & Blue 51–58)

? Passive Optical Design – No External Power Required

? Standard 1U 19-inch Rack Mount

? Includes 2 LGX Fiber Modules

? Low Insertion Loss & High Channel Isolation

? Maximizes Fiber Capacity Without Installing Additional Fiber

? High Reliability with Minimal Maintenance

Technical Specifications

Category	Specification
Product Type	DWDM MUX / DEMUX (BiDi)
DWDM Channels	8 Channel
Channel Group	Red 21–28 & Blue 51–58
Transmission Mode	Single Fiber BiDi
Technology	Dense Wavelength Division Multiplexing (DWDM)
Rack Size	1U, 19-inch Rack Mount
Fiber Modules	2 × LGX Fiber Modules
Power Requirement	Passive Device (No Power Required)
Installation	Standard 19-inch Rack
Application	Metro Networks, ISP, Telecom, Enterprise Backbone, Data Center

Channel Configuration

Channel Group	ITU-T DWDM Channels	Transmission
Red Band	CH21 – CH28	BiDi
Blue Band	CH51 – CH58	BiDi

Applications

Telecom Backbone Networks

ISP Optical Networks

Metro Ethernet Networks

Data Center Interconnection

Enterprise Optical Backbone

Long Distance Fiber Transmission

Campus Optical Networks

Fiber Capacity Expansion Projects

Advantages of DWDM Technology

Increase fiber transmission capacity without deploying additional fiber.

Supports simultaneous transmission of multiple independent optical channels.

Passive architecture offers excellent reliability with zero power consumption.

Ideal for high-bandwidth metro, telecom, ISP, and data center backbone applications.

Scalable solution for future network expansion while minimizing infrastructure costs.