

1U rack DWDM 8CH W/O Card

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Variants

1 U

Details

The **1U Rack DWDM 8CH MUX/DEMUX (Without Card)** is a high-performance, passive optical device designed for dense wavelength division multiplexing (DWDM) applications. It enables efficient multiplexing and demultiplexing of up to 8 DWDM channels onto a single pair of optical fibers, greatly increasing the bandwidth capacity of existing fiber infrastructure. Housed in a standard 1U 19-inch rack-mount chassis, this unit is ideal for use in telecom rooms, data centers, and enterprise networks. The "Without Card" configuration means it comes as a passive module without a monitoring card, fan, or power requirement—making it maintenance-free and highly reliable.

Key Features:

1. **Form Factor:** 1U 19-inch rack-mount enclosure
2. **Channel Count:** 8 DWDM channels (customizable ITU-T Grid, e.g., C21 to C28)

3. **Type:** Passive MUX/DEMUX (no power or card required)
4. **Connector Type:** LC/UPC or LC/APC (customizable)
5. **Fiber Type:** Singlemode (G.652D or G.657A1)
6. **Wavelength Spacing:** 100GHz or 200GHz ITU-T DWDM Grid
7. **Insertion Loss:** ? 3.5 dB (typical)
8. **Channel Isolation:** ? 30 dB (adjacent), ? 40 dB (non-adjacent)
9. **Return Loss:** ? 45 dB
10. **Operating Temperature:** -5°C to +75°C
11. **Storage Temperature:** -40°C to +85°C
12. **No power required (passive device)**

Applications:

1. DWDM network expansion
2. Long-haul and metro fiber optic transmission
3. Enterprise and carrier-grade networks
4. Data center interconnect (DCI)
5. FTTx, backbone, and core networks

Advantages:

1. Boosts network capacity without installing additional fiber
2. Completely passive—no power or active management needed
3. Space-saving 1U rack-mount design
4. Compatible with all standard DWDM transceivers
5. Cost-effective solution for WDM deployment

