



EKINOPS RM OM64FTC

75 GHz Optical Multiplexer/Demultiplexer for Coherent Channels

DATA SHEET 08 2021

KEY FEATURES& BENEFITS

- Up to 64 channels in 1RU form factor
- Wideband filter design for high baud rate channels up to 600G
- · Accommodates any coherent channel
- · Protocol and data rate independent
- Low insertion loss
- High performance flat top (FT) waveform
- Dual monitoring ports
- · No power required

APPLICATIONS

- Multi-channel coherent wavelength transport
- Fiber optimization of any Metro, Regional or Long Haul WDM network
- Point to point, linear, ring, star and mesh topologies

OVERVIEW

The EKINOPS RM OM64FTC is a passive dense wavelength division multiplexing (DWDM) shelf that allows users to multiplex (MUX) and de-multiplex (DEMUX) wavelengths over a single fiber pair to provide the highest level of transport efficiency in optical networks. The RM OM64FTC provides support for two to 64 channels with 75 GHz spacing delivering a 25% increase in spectral efficiency compared to the standard 100GHz ITU grid for carrying high baud rate channels up to 600Gbps.

The EKINOPS RM OM64FTC provides a flat-top shape for optimal filtering using wideband arrayed waveguide (AWG) technology. Wideband AWG is designed specifically for the higher baud rates used to create today's ultra-fast coherent channels. It also minimizes cross-talk so that wavelengths can travel farther with less interference. Dual independent monitoring ports provide access to optical signal on both transmit and receive sides.

The EKINOPS RM OM64FTC is rate independent and can be deployed in point to point, linear, ring, star, and mesh topologies. The solution comes in a compact 1 RU rack mountable micro chassis so it fits into any available rack space. As a passive device, it requires no power to operate.

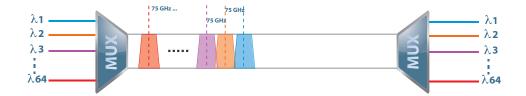


Figure 1: RM OM64FTC supports up to 64 channels with 75 GHz spacing







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SPECIFICATIONS

· PHYSICAL SPECIFICATIONS

Optical connectors LC Size 1RU

Operating Temperature $0^{\circ}\text{C to } +50^{\circ}\text{C} / +32\text{F}^{\circ} \text{ to } +122\text{F}^{\circ}$ Storage Temperature $-20^{\circ}\text{C to } +85^{\circ}\text{C} / -4\text{F}^{\circ} \text{ to } +185\text{F}^{\circ}$

OPTICAL CHARACTERISTICS

191.35 THz - 196.075 THz (1528 nm - 1566 nm) Wavelength range 75 GHz Wavelength spacing Channels (max.) 64 Total input power (max.) 24 dBm Return loss 40 dB Insertion loss 6.5 dB Pass bandwidth ± 31.5 GHz Isolation (adjacent channels) 8 dB Isolation (non adjacent channels) 33 dB Polarization Dependent Loss (PDL) 0.7 dB Chromatic Dispersion (CD) ± 33 ps/nm Polarization Mode Dispersion (PMD) 1 ps

17 dB

Monitoring port insertion loss

• REFERENCE STANDARD

ITU-T G959.1; ITU G.694.1; ROHS 6

ORDERING INFORMATION

RACK MOUNTABLE UNIT (RM)

PRODUCT CODE DESCRIPTION

RM_OM64FTC Rack Mount of 64 channels MUX/DEMUX 75 GHz, for coherent systems only

CONTACT



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