EKINOPS RM OM40
40 Channel Passive Optical WDM Multiplexer

KEY FEATURES & BENEFITS

- DWDM MUX/DMUX supporting 2-40 channels
- Upgrade port for cascading additional MUXs
- Protocol and data rate independent
- No power required; can be integrated in powered or non-powered chassis
- Low insertion loss
- Standard *(Gaussian)* and optimized Flat Top version available

APPLICATIONS

- Metro, regional and long haul WDM networks
- Point to point, linear, ring, star and mesh topologies

OVERVIEW

The Ekinops Wave Division Multiplexing platform allows users to Multiplex *(MUX)* and De-Multiplex *(DMUX)* multiple wavelengths over one fiber combined with a flexible architecture that ensures the highest level of transport efficiency in optical networks.

Ekinops provides a wide variety of options in passive optical multiplexing technology in order to allow for optimal flexibility in customer deployments. The Ekinops 360 is a scalable platform that was designed for simple and cost-effective growth. The EKINOPS RM OM40 channel MUX/DMUX is one of a family of passive optical filters available for the Ekinops 360 platform. The EKINOPS RM OM40 has a flat-top shape that provides optimized filtering. This module is ideal for long reach deployments that require large channel counts. But it has also proven to be an excellent economical solution for smaller channel count deployments as well.

The EKINOPS RM OM40 channel MUX/DMUX can be upgraded in the field without disruption of service. The MUX/DMUX is equipped with an upgrade port that allows EKINOPS RM OM40 channel units *(1 for Even Channels and 1 for Odd Channels)* to be chained together to provide up to 80 channels of multiplexing capability.

The EKINOPS RM OM40 channel MUX/DMUX is designed for DWDM applications and provides 100GHz spacing of channels. In addition, the RM OM40 Channel MUX/DMUX 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. This makes it ideal for space constrained environments.
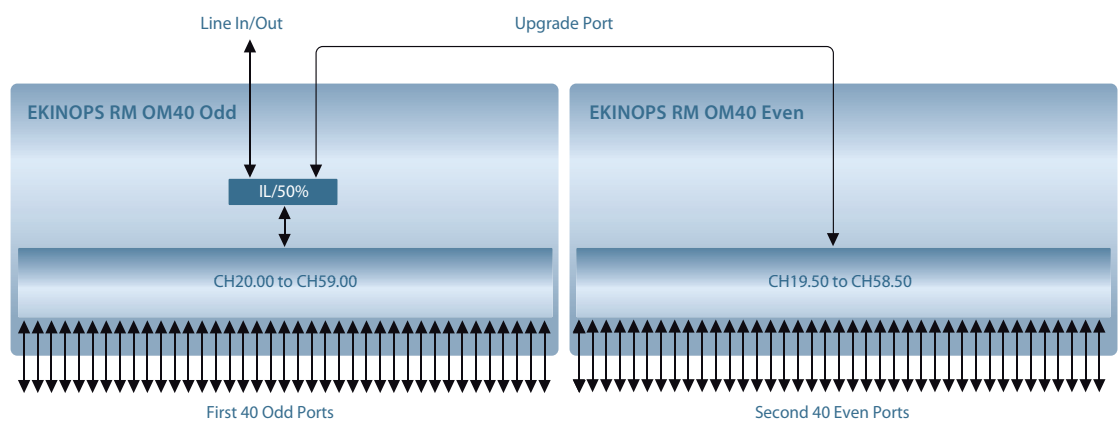
NETWORK TOPOLOGY

Figure: 80 Wavelengths (2 x 40)

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SPECIFICATIONS

• PHYSICAL SPECIFICATIONS

Optical connectors	LC
Size	1RU rack-mount
Operating Temperature	0℃ to +50℃ / +32F° to +122F°
Storage Temperature	-20℃ to +85℃ / -4F° to +185F°
Operating Wavelength	1528 nm – 1563 nm
Return Loss	30 dB

• OPTICAL CHARACTERISTICS FOR EKINOPS RM OM40

Insertion loss	OM40FT_Odd	OM40FT_Even	OM40FT_OU
Frequencies	192.00 – 195.90 THz	191.95 – 195.85 THz	192.00 – 195.90 THz
MUX	< 6 dB	< 6 dB	< 8.5 dB
DMUX IL	< 6 dB	< 6 dB	< 7.0 dB
MUX Upgrade Port IL	N/A	N/A	< 3.5 dB
DMUX Upgrade Port IL	N/A	N/A	< 2 dB
Total IL Pair MUX and DMUX	12 dB	12 dB	15,5 dB

Specification MUX / DMUX	OM40 MUX (all versions)	OM40 DMUX (all versions)
Bandwidth @1 dB	±0.125 nm	± 12.5.0 Ghz
Isolation (adjacent channels)	N/A	> 28 dB
Isolation (no adjacent channels)	N/A	> 40 dB
Upgrade Port Isolation	N/A	> 12 dB
Total Crosstalk	N/A	-23 dB
PDL	0.5 dB	0.7 dB
PMD	< 1 ps	< 1.5 ps
Optical Return Loss	> 45 dB	> 45 dB

ORDERING INFORMATION

RACK MOUNT (RM)

PRODUCT CODE	DESCRIPTION
RM_OM40FT-O	Rack Mount of 40 channels Flat Top MUX/DMUX 100GHz odd channels
RM_OM40FT-O-U	Rack Mount of 40 Flat Top channels MUX/DMUX 100GHz grid odd channels (50GHz filter bandwidth) with upgrade port
RM_OM40FT-E	Rack Mount of 40 channels Flat Top MUX/DMUX 100GHz even channel

CONTACT

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