# DCP-M40-PAM4-ER

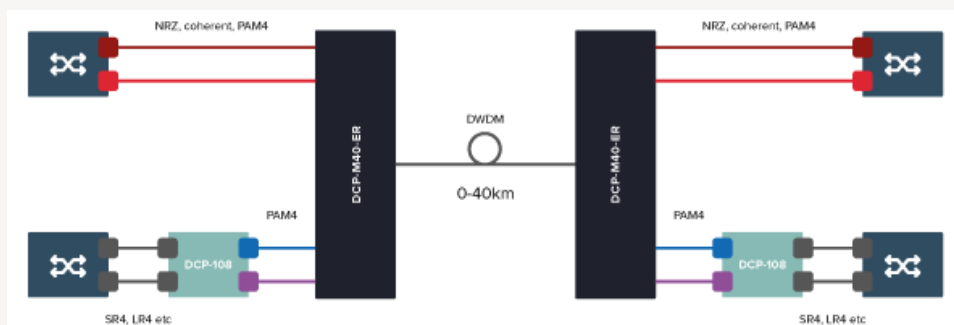Multi-format 40 channel DWDM open line system (0-40 km)



## AN OPEN LINE PLATFORM DESIGNED FOR DCI

DCP-M is a true open line DWDM platform designed specifically for modern DCI. DCP-M has the form factor and usability of a passive multiplexer, but unlike a passive multiplexer it monitors the traffic, amplifies the signals for longer distances and can handle higher data rate protocols. DCP-M provides everything required for an open line system and is simple, reliable and open for all DCI protocol types. DCP-M offers an unparalleled level of plug and play simplicity regardless of traffic type and network application. The DCP-M family comprises four models for either 8 or 40 channels, dedicated for either 100G DWDM PAM4 traffic or for applications with any mix of PAM4, NRZ and coherent 100/400G channels.

## DCP-M40-PAM4-ER IN SHORT

- 40 channel active DWDM multiplexer for open line systems
- Accepts any DWDM signal format: PAM4 (40G/100G), NRZ(1-32G), Coherent (QPSK/8QAM/16QAM)
- Up to 40 km of reach
- Unprecedented level of cost efficiency and ROI for 100G Data Center Interconnect (DCI)
- High speed multi-protocol capability
- Industry defining 1U form factor
- Automated configuration and zero touch provisioning - behaves like a passive multiplexer
- Automatic fiber distance measurement and dispersion compensation
- Modern REST based management architecture with standard and customizable APIs



## AUTOMATED CONFIGURATION, ZERO-TOUCH PROVISIONING AND SMART MANAGEMENT

DCP-M brings an unprecedented level of plug and play simplicity to DWDM DCI networking, being designed with ease of use in mind. Power levels are automatically regulated and a visual confirmation via LEDs shows that channel and line are set up correctly. Automated configuration and zero-touch provisioning mean that installation and adding new connections can be done in minutes also by staff with only a basic knowledge of optical networking.

# ORDERING INFORMATION

| DCP-M Series product codes | |
| --- | --- |
| DCP-M40-PAM4-ER/HW | Base HW, 40ch/100GHz Open Line System, PAM4 0-40km, NRZ/Coh, Ch921-960, OSC, Mux/Demux, EDFA, OCM, OCQ, DCM, 1RU, 19", D=510mm, fans, no PSU |
| DCP-M-ENL-7.x_SW | DCP-M Embedded Node Licence for software release 7.x |
| DCP-2-PSU-AC-FB | AC power supply for DCP platform, Front-to-Back airflow |
| DCP-2-PSU-DC-FB | DC power supply for DCP platform, Front-to-Back airflow |
| **Spares** | |
| DCP-2-FAN-FB | Spare fan unit, Front-to-Back |

# TECHNICAL SPECIFICATIONS

## PRODUCT CONFIGURATION
40 channel DWDM open line system for
metro DWDM, DCI and dark fiber connectivity.

Supported encodings:
- PAM4 (40G/100G)
- NRZ (1-32G)
- Coherent (QPSK/8QAM/16QAM)

Supported protocols:
- 1/10/40/100/200/400G Ethernet
- 1/2/4/8/16/32G Fiber Channel
- Other protocols may be supported, contact Smartoptics for more information.

## FRONT SIDE CONNECTIONS
All ports are of LC connector type

40 x DWDM client channels D921 to D960
1 x Line input/output port

## VISUAL INDICATORS
Status LED Power & Alarm status
Client LED: 40 x individual client Tx/Rx
Line LED: Line Tx/Rx

## REAR SIDE CONNECTIONS
Management and console ports
4 x RJ45 Management ports 10/100/1000 Base-T
1 x SFP Management port 1000 Base-X
1 x RS-232 serial port
1 x RJ-45 Local craft 10/100/1000 Base-T

2 x Power supplies:    Single/dual feeding. Hot swappable.
1 x Fan unit:          Redundant plugin. Hot swappable.

## MANAGEMENT
CLI, SSH, SNMPv2c, SNMPv3
NTP, SFTP, Syslog, RADIUS, TACACS+

## SOFTWARE UPGRADES
Traffic hitless software upgrades

## DIMENSIONS
Size (WxDxH)
440mm x 510mm x 1RU
17.3" x 20" x 1RU
Weight: 13 Kg / 28.7 lbs.

## EYE SAFETY
Laser safety class 1M

## POWER CONSUMPTION
Typical consumption at 220VAC:
Normal operation: 45W
Max during power up: 65W

AC Fuse:          100-127 VAC (3A)
                  200-240 VAC (1.5A)

DC Fuse:          -40 to -72 VDC (7A)

## ENVIRONMENTAL
Operating temp:   0° C to +45° C
Cooling:          Front to back
Humidity:         5% to 85%
Altitude:         3000 m (10.000 ft.)

## OPTICAL SPECIFICATION
Fiber distance:   0 – 40 km
Fiber link loss:  0 – 14 dB
Fiber types:      G.652 (SMF-28)

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