



DATASHEET

# DCP-M40-C-ZR+

40 channel DWDM open line system optimized for coherent services (0-160 km)

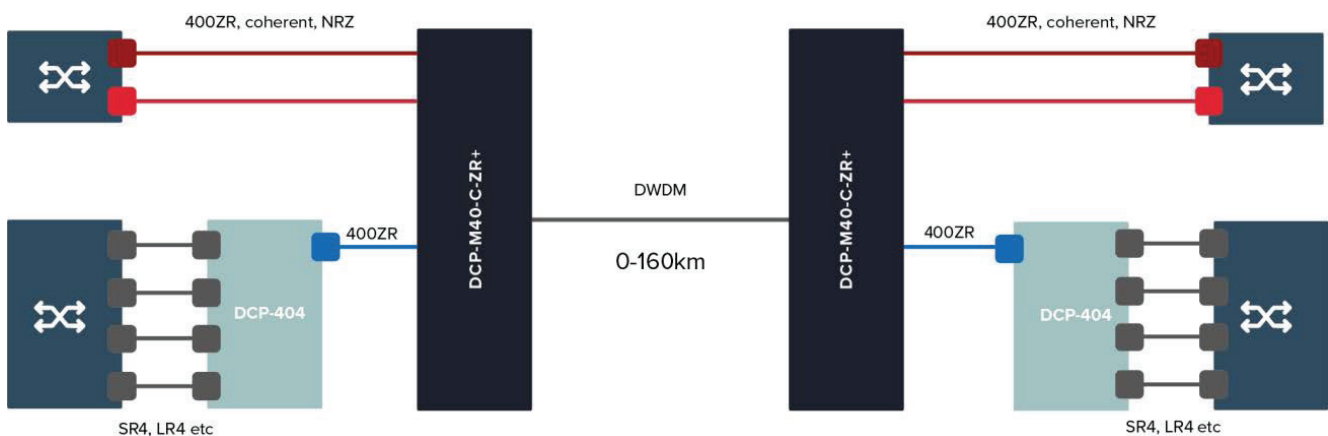


## AN OPEN LINE PLATFORM DESIGNED FOR DCI

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 five models for either 8 or 40 channels, dedicated for either 100G DWDM PAM4 traffic, 400ZR traffic or for applications with any mix of PAM4, NRZ and coherent 100/400G channels.

## DCP-M40-C-ZR+ IN SHORT

- 40 channels active DWDM multiplexer for open line systems
- Accepts the following DWDM signal format: Coherent (QPSK/8QAM/16QAM) including 400ZR and NRZ (1-10G)
- Up to 160 km of reach depending on modulation format
- Unprecedented level of cost efficiency and ROI for 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
- 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-C-ZR+/HW	Base HW, 40 channel DWDM OLS, D921-D960, OSC, 0-160km, NRZ, Coherent
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
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## TECHNICAL SPECIFICATIONS

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

**Supported encodings:**

- NRZ (1-10G)
- Coherent (QPSK/8QAM/16QAM)

**Supported protocols:**

- 1/10/40/100/200/400G Ethernet
- 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.

<b>MANAGEMENT</b>	CLI, SSH, SNMPv2c, SNMPv3 NTP, SFTP, Syslog, RADIUS, TACACS+
<b>SOFTWARE UPGRADES</b>	Traffic hitless software upgrades
<b>DIMENSIONS</b>	Size (WxDxH) 440mm x 510mm x 1RU 17.3" x 20" x 1RU <b>Weight:</b> 13 Kg / 28.7 lbs.
<b>EYE SAFETY</b>	Laser safety class 1M
<b>POWER CONSUMPTION</b>	<b>Typical consumption at 220VAC:</b> <b>Normal operation:</b> 35 W <b>Max during power up:</b> 55 W  <b>AC Fuse:</b> 100-127 VAC (3A) 200-240 VAC (1.5A)  <b>DC Fuse:</b> -40 to -72 VDC (7A)
<b>ENVIRONMENTAL</b>	<b>Operating temp:</b> 0°C to +45°C <b>Cooling:</b> Front to back <b>Humidity:</b> 5% to 85% <b>Altitude:</b> 3000 m (10.000 ft)
<b>OPTICAL SPECIFICATION</b>	1G – 10G, NRZ Optics dependant  OIF 400ZR, 400G 16-QAM Fiber link loss: 0 – 26 dB OpenZR+, 400G 16-QAM Fiber link loss: 0 – 28 dB OpenZR+, 300G, 8-QAM Fiber link loss: 0 – 29 dB OpenZR+, 100G & 200G QPSK Fiber link loss: 0 – 29 dB

The coherent formats are not distance limited by dispersion.

\*\* The information in this document is valid from release R8.1.1