



DATASHEET 4.3

# DCP-M40-PAM4-ER

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

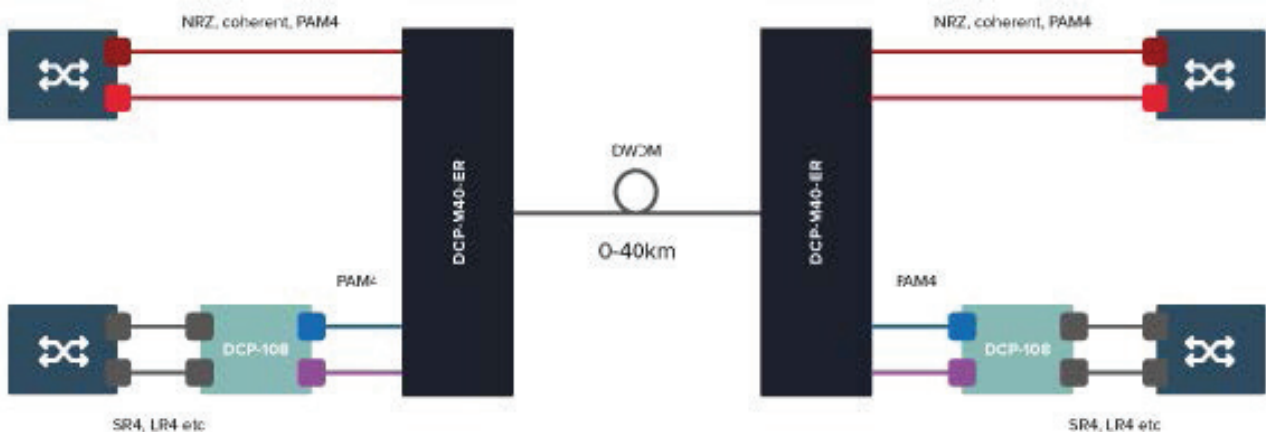


## AN OPEN LINE PLATFORM DESIGNED FOR DCI

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 40km 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
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## 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

<b>REAR SIDE CONNECTIONS</b>	<p>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</p> <p><b>2 x Power supplies:</b> Single/dual feeding. Hot swappable.  <b>1 x Fan unit:</b> Redundant plugin. Hot swappable.</p>
<b>MANAGEMENT</b>	<p>CLI, SSH, SNMPv2c, SNMPv3  NTP, SFTP, Syslog, RADIUS, TACACS+</p>
<b>SOFTWARE UPGRADES</b>	Traffic hitless software upgrades
<b>DIMENSIONS</b>	<p>Size (WxDxH)  440mm x 510mm x 1RU  17.3" x 20" x 1RU  <b>Weight:</b> 13 Kg / 28.7 lbs.</p>
<b>EYE SAFETY</b>	Laser safety class 1M
<b>POWER CONSUMPTION</b>	<p><b>Typical consumption at 220VAC:</b>  <b>Normal operation:</b> 45W  <b>Max during power up:</b> 65W</p> <p><b>AC Fuse:</b> 100-127 VAC (3A)  200-240 VAC (1.5A)</p> <p><b>DC Fuse:</b> -40 to -72 VDC (7A)</p>
<b>ENVIRONMENTAL</b>	<p><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)</p>
<b>OPTICAL SPECIFICATION</b>	<p><b>Fiber distance:</b> 0 – 40 km  <b>Fiber link loss:</b> 0 – 14 dB  <b>Fiber types:</b> G.652 (SMF-28)</p>