

# DCP-M40-MSO-ZR

Multi-format 40 channel DWDM open line system (0-80 km)

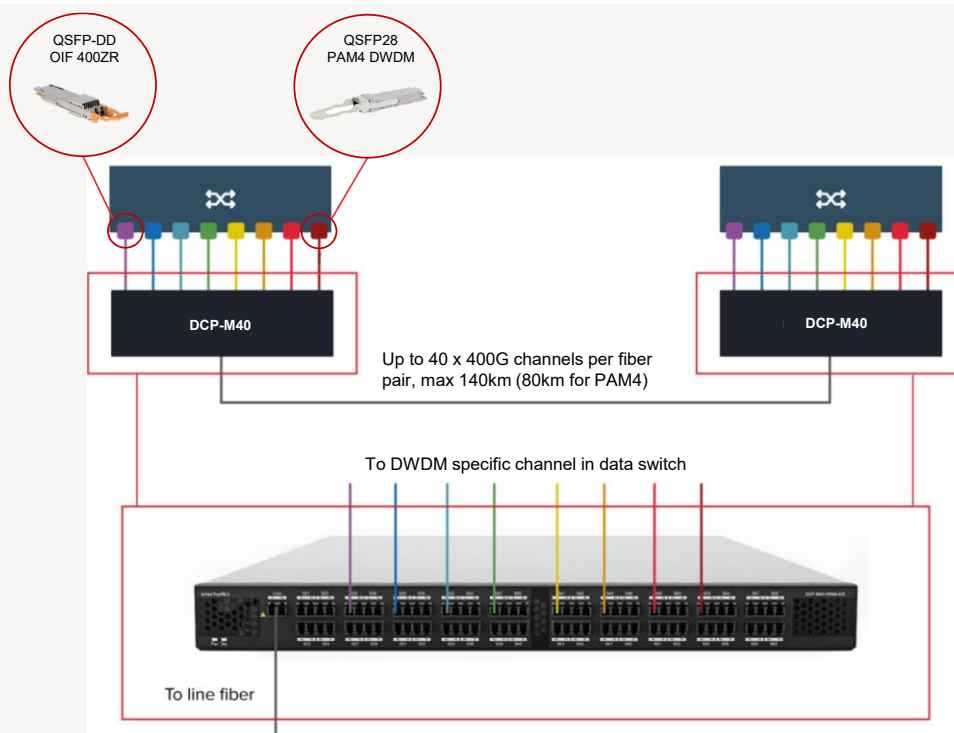


## AN OPEN LINE PLATFORM DESIGNED FOR DCI

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 six models for either 8, 32 or 40 channels, dedicated for either 100G DWDM PAM4, 400ZR, 800G or for applications with any mix of PAM4, NRZ and coherent 100/400G channels.

## DCP-M40-MSO-ZR IN SHORT

- 40 channels active DWDM multiplexer for open line systems. Mux/demux with 80GHz 3dB bandwidth to support 400G signals.
- Accepts any DWDM signal format: PAM4 (40G/100G), NRZ(1-32G), Coherent (QPSK/8QAM/16QAM)
- Up to 80 km of reach for PAM4 modulated signal. Extended reach for other formats.
- Pluggable OSC port for different reach and for OTDR possibility
- OTDR filter port for external 1625nm OTDR sources available on the front
- 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
- Management support via SNMP and gNMI



## AUTOMATED CONFIGURATION AND MANAGEMENT WITH SOSMART

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 means that installation and adding new connections can be done in minutes also by staff with only a basic knowledge of optical networking.

The DCP-M40-CSO-ZR can be managed via Smartoptics network management system SoSmart.

## ORDERING INFORMATION

DCP-M Series product codes	
DCP-M40-MSO-ZR/HW	Base HW, 40ch/100GHz Open Line System, PAM4 0-80km, NRZ/Coh, Ch921-960, OSC, OTDR, Mux/Demux, EDFA, OCM, OCQ, DCM, 1RU, 19", D=510mm, fans, no PSU
DCP-M-ENL-12.x_SW	DCP-M Embedded Node Licence for software release 12.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 (100-400G, 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

1 x RS-232 serial port  
1 x RJ-45 Local craft 10/100/1000 Base-T  
1 x SFP port for OSC/OTDR

All optical ports are of LC connector type  
40 x DWDM client channels D921 to D960  
1 x Line input/output port  
1 x 1510nm OSC port  
1 x 1625nm external OTDR port

### VISUAL INDICATORS

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

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+  
gNMI

### SOFTWARE UPGRADES

Traffic hitless software upgrades

### DIMENSIONS

Size (WxDxH)  
440mm x 510mm x 1RU  
17.3" x 20" x 1RU  
Weight: TBD Kg / TBD lbs.

### EYE SAFETY

Laser safety class 1

### POWER CONSUMPTION

Typical consumption at 220VAC:  
Normal operation: TBD W  
Max during power up: TBD W

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 PERFORMANCE

#### OPTICAL SPECIFICATION

Fiber distance: 0 – 80 km\*  
Fiber link loss: 0 – 18 dB  
Fiber types: G.652 (SMF-28)

The coherent formats are not distance limited by dispersion.

*Note. The information in this document is valid from release R12.1.1*