

DATASHEET

# DCP-M32-CSO-ZR+

32 channel DWDM open line system optimised for coherent services (0-160 km)

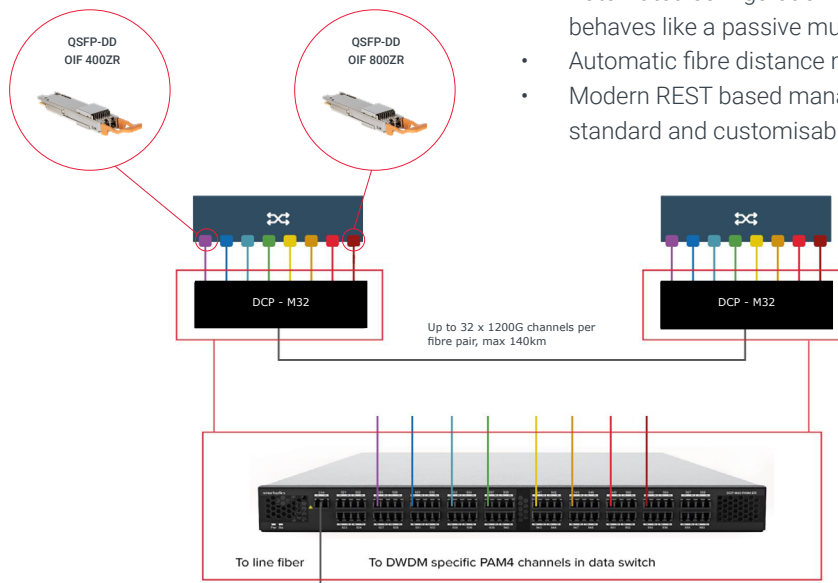


## AN OPEN LINE PLATFORM DESIGNED FOR DCI

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 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-M32-CSO-ZR+ IN SHORT

- 32 channels active DWDM multiplexer for open line systems. 150GHz channel spacing to support 800G signals.
- Accepts the following DWDM signal formats: Coherent 100G to 800G (QPSK/8QAM/16QAM).
- Up to 160 km of reach depending on modulation format.
- 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 Data Center Interconnect (DCI).
- High speed multi-protocol capability. Mux/demux with 150GHz 3dB bandwidth to support 800G signals.
- Industry defining 1U form factor.
- Automated configuration and zero touch provisioning - behaves like a passive multiplexer.
- Automatic fibre distance measurement.
- Modern REST based management architecture with standard and customisable 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-M32-CSO-ZR+/HW	Base HW, 32ch/150GHz Open Line System, 0-160km, Coh, ChD914-D960.5, OSC, OTDR, Mux/Demux, EDFA, OCM, OCQ, 1RU, 19", D=510mm, fans, no PSU
DCP-M-ENL-10.x_SW	DCP-M Embedded Node Licence for software release 10.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** 32 channel DWDM open line system for metro DWDM, DCI and dark fibre connectivity.

**Supported encodings:**

- Coherent 100G-800G (QPSK/8QAM/16QAM)

**Supported protocols:**

- 100/200/400/800G Ethernet

- 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  
32 x DWDM client channels D914 to D960.5  
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: 32 x individual client Tx/Rx  
Line LED: Line Tx/Rx  
OSC LED: OSC 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</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+ gNMI from R11.x</p>
<b>SOFTWARE UPGRADES</b>	<p>Traffic hitless software upgrades</p>
<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>	<p>Laser safety class 1</p>
<b>POWER CONSUMPTION</b>	<p><b>Typical consumption at 220VAC:</b>  <b>Normal operation:</b> 35W  <b>Max during power up:</b> 55W</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 PERFORMANCE</b>	<p>OIF 400ZR, 400G 16QAM  <b>Fibre link loss:</b> 0 – 25 dB</p> <p>OpenZR+, 400G 16QAM  <b>Fibre link loss:</b> 0 – 28 dB</p> <p>OIF, 800G, 16QAM  <b>Fibre link loss:</b> 0 – 25 dB</p> <p>800G ZR+, 16QAM  <b>Fibre link loss:</b> 0 – 28 dB</p> <p>The coherent formats are not distance limited by dispersion.</p>

\*\* The information in this document is valid from release R10.2.1