

DATASHEET 4.1

DCP-M40-PAM4-ZR

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

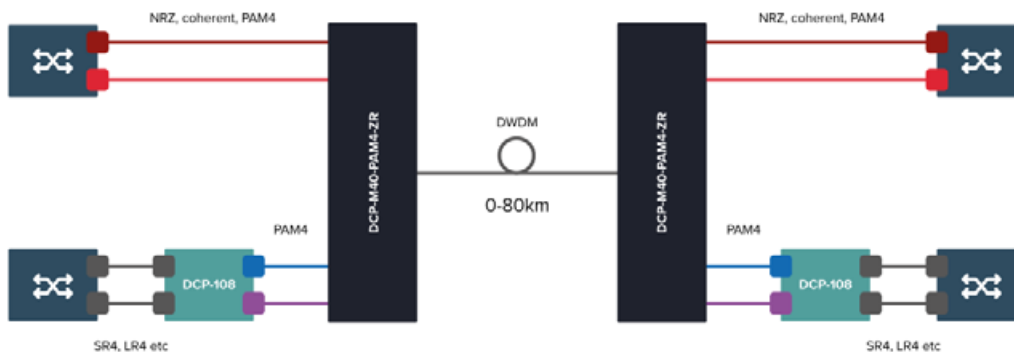


AN OPEN LINE PLATFORM DESIGNED FOR DCI

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 five 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-ZR IN SHORT

- 40 channel active DWDM multiplexer for open line systems
- Accepts any DWDM signal format: PAM4 (40G/100G), NRZ(1-16G), Coherent (QPSK/8QAM/16QAM)
- Up to 80 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.

TECHNICAL SPECIFICATIONS

PRODUCT CONFIGURATION	40 channel DWDM open line system for metro DWDM, DCI and dark fiber connectivity.	
	Supported encodings: - PAM4 (40G/100G) (Maximum 20 x PAM4 signals) - NRZ (1-16G) - Coherent (QPSK/8QAM/16QAM)	Supported protocols: - 1/10/40/100/200/400G Ethernet - 1/2/4/8/16G 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 PROTOCOLS	SSH/CLI, SNMP, REST, NTP, TFTP, Syslog	
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:	40 – 80 km
	Fiber link loss:	0 – 18 dB
	Fiber types:	G.652 (SMF-28)

ORDERING INFORMATION

DCP-M Series product codes	Description
DCP-M40-PAM4-ZR	40 channel DWDM OLS, D921-D960, OSC, 40-80km, PAM4, NRZ, Coherent
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	Description
DCP-2-FAN-FB	Spare fan unit, Front-to-Back