



DATASHEET R1.0

DCP-R-34D-CS

Coherent optimized 34-degree ROADM
based on OpenROADM models



AN OPEN LINE SYSTEM PLATFORM DESIGNED FOR FLEXIBLE NETWORKS

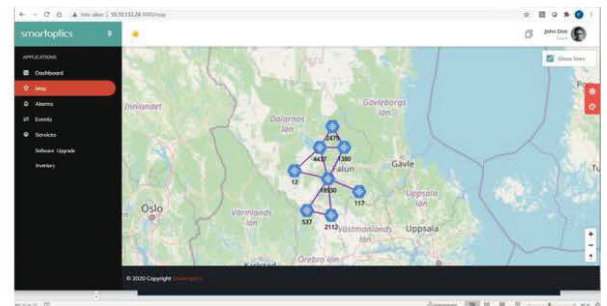
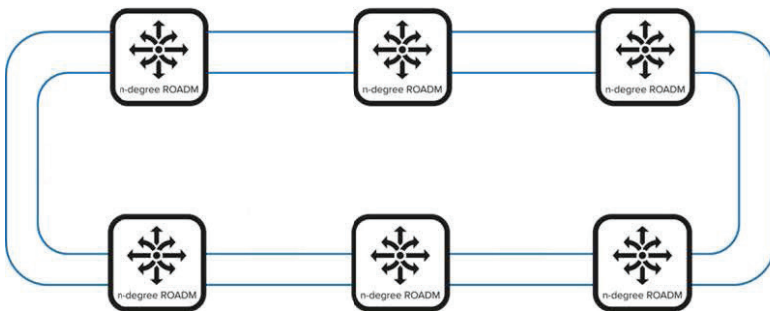
For networks where wavelength manageability, capacity and reliability are at a premium, the Smartoptics DCP-R family of multi-degree ROADMs is the optimal choice. The DCP-R is a dedicated 1U per degree ROADM with FlexGrid, directionless, contention less and colorless capabilities. The ROADM, with 34 WSS port for local add/drop or express, is designed for use with 400ZR transceivers as well as future coherent signals with different bandwidth, e.g. 800G. The DCP-R-34D-CS is designed to be used in for ring or meshed metro/regional applications with up to 12-degrees.

DCP-R-34D-CS IN SHORT

- Modern management architecture based on OpenROADM yang models and APIs
- Typically managed via the NetConf protocol (CLI also supported)
- Uses TransportPCE as a SDN controller and the SoSmart software suite for management
- Automatic detection of the optical characteristics of the fiber
- Support for a mixture of modulation formats such as 400ZR OIF, 800G, NRZ & coherent wavelengths
- CDC-F capable (colorless, directionless, contention less and FlexGrid)
- Optimized for ring and mesh network topologies with up to 12-degree ROADMs
- 34 WSS ports that can be individually configured to add/drop or express
- Can be combined with couplers for higher port count or directionless functionality
- Scalable and cost effective datacom platform

POINT AND CLICK PROVISIONING BASED ON MODERN SOFTWARE ARCHITECTURE

The DCP-R family supports a high level of automation and openness. The DCP-R-34D-CS is typically controlled through the NetConf protocol according to the principles outlined by the OpenROADM MSA architecture and with TransportPCE as the SDN controller. The SoSmart software suite from Smartoptics provides capabilities for management, point-and-click provisioning, fault finding and optical simulations.



ORDERING INFORMATION

DCP-M Series product codes

DCP-R-34D-CS/HW	Base HW, 34-Degree ROADM, Coherent Services support, OSC, EDFA, OCM, flexgrid WSS, 19", D=510mm, fans, no PSU
DCP-R-ENL-10.x_SW	DCP-R 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 1RU 34-Degree Flex ROADM, NRZ/Coh, open line system for ring and meshed networks.

Supported encodings:

- NRZ (dispersion limited by the selected optics)
- Coherent (QPSK/8QAM/16QAM)
- 400ZR
- 800G

FRONT SIDE CONNECTIONS The following ports are of LC connector type

- 1 x Line input/output port
- 34 x Add-drop/Cross connect ports
- 1 x 1510nm input/output port for OSC

VISUAL INDICATORS Status LED Power & Alarm status
XC LED: 34 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 CLI, SSH, SNMPv2c, SNMPv3, NETCONF
NTP, SFTP, Syslog, RADIUS, TACACS+

SOFTWARE UPGRADES Traffic hitless software upgrades

DIMENSIONS Size (WxDxH)
440mm x 510mm x 1RU
17.3" x 20" x 1RU
Weight: 10 Kg / 22 lbs.

EYE SAFETY Laser safety class 1M

POWER CONSUMPTION **Typical consumption at 220VAC:**
Normal operation: 65W
Max during power up: 85W

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.)

NOTE. THE INFORMATION IN THIS DOCUMENT IS VALID FROM RELEASE R10.0.1