

# DCP-R-34D-CS

Coherent optimized 34-degree ROADMs based on OpenROADM models



## AN OPEN LINE SYSTEM PLATFORM DESIGNED FOR FLEXIBLE NETWORKS

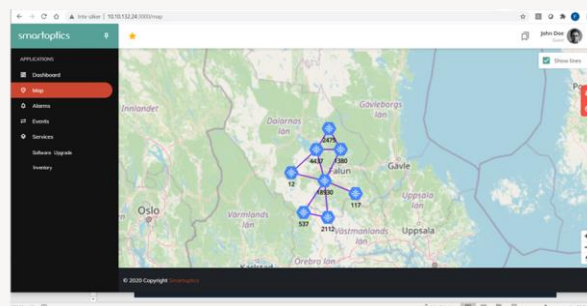
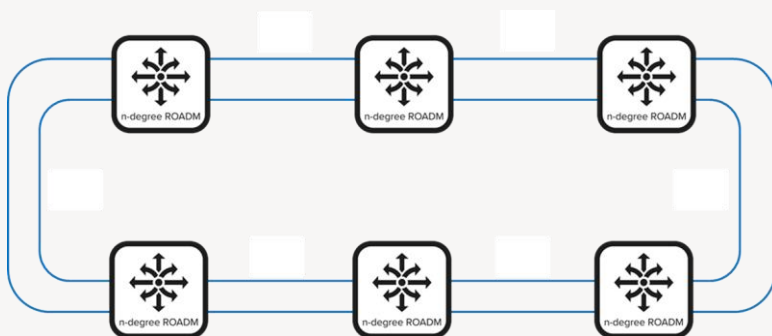
For networks where wavelength manageability, capacity and reliability are at a premium, the Smartoptics DCP-R family of multi-degree ROADMs is the optimal choice. The DCP-R is a dedicated 1U per degree ROADM with FlexGrid, directionless, contention less and colorless capabilities. The ROADM, with 34 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 API:s
- 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

## 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

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

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

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: 9.3 Kg with 2xPSU

### EYE SAFETY

Laser safety class 1M

### POWER CONSUMPTION

Typical consumption at 220VAC:  
Normal operation: 65W  
Max during power up: 97W

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 R10.0.2

Subject to change without notice.

For more information visit [smaroptics.com](http://smaroptics.com).

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