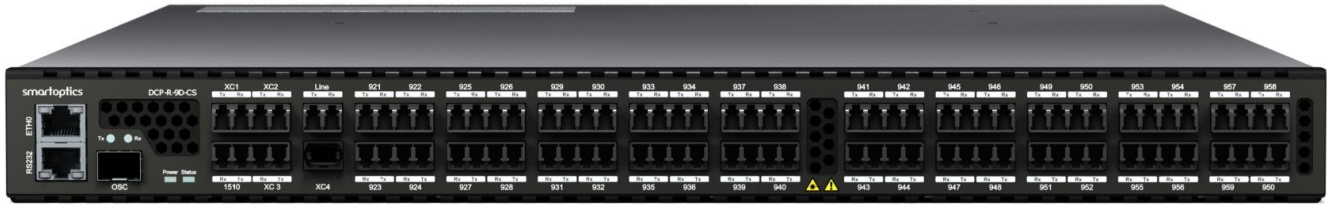


# DCP-R-9D-CS

Coherent optimized 9-degree ROADM based on OpenROADM models



## AN OPEN LINE SYSTEM PLATFORM DESIGNED FOR FLEXIBLE NETWORKS

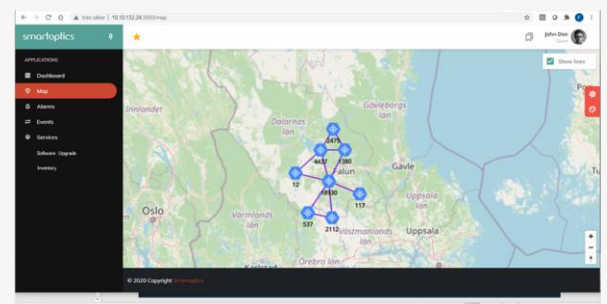
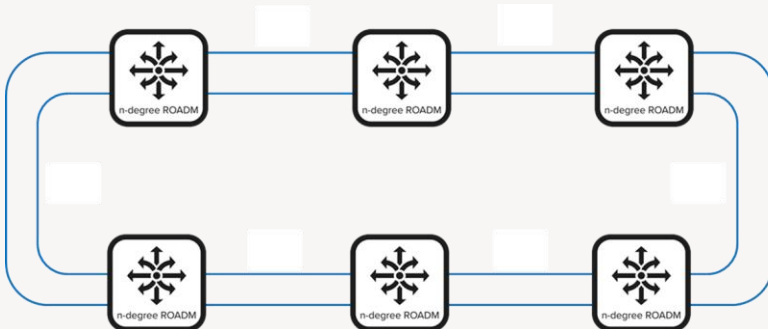
For networks where wavelength manageability, capacity and reliability are at a premium, the Smartoptics DCP-R family of multi-degree ROADMs is the optimal choice. The DCP-R is a dedicated 1U per degree ROADM with FlexGrid, directionless, contention less and colorless capabilities. The ROADM, with integrated mux/demux for local add/drop, is designed for use with 400ZR transceivers as well as with legacy 100G and 200G coherent signals. The DCP-R-Metro is designed to be used in for ring or meshed metro applications with up to 9-degrees.

## DCP-R-9D-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, NRZ & coherent wavelengths
- CDC-F capable (colorless, directionless, contention less and FlexGrid)
- Optimized for ring and mesh network topologies with up to 9-degree ROADMs
- Integrated 40ch Mux/Demux with 100GHz channel spacing according to ITU-T grid from 192.1 to 196.0 THz
- 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-9D-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.



Subject to change without notice.

For more information visit [smartoptics.com](https://www.smartoptics.com).

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## ORDERING INFORMATION

DCP-M Series product codes	
DCP-R-9D-CS/HW	Base HW, 9-Degree ROADM, Coherent Services support, OSC, EDFA, OCM, Flexgrid WSS, 40ch/100GHz AWG, 1RU, 19"
DCP-R-ENL-7.x_SW	DCP-R Embedded Node Licence for software release 7.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 9-Degree Flex ROADM, 40ch/100GHz NRZ/Coh, open line system for ring and meshed networks.

#### Supported encodings:

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

### FRONT SIDE CONNECTIONS

The following ports are of LC connector type

40 x DWDM client channels D921 to D960

1 x Line input/output port

3 x Add-drop/Cross connect ports

1 x MPO based Add-drop/Cross connect ports consisting of

5 x add & 5 x drop WSS's.

### VISUAL INDICATORS

Status LED Power & Alarm status

Client LED: 40 x individual client Tx/Rx

XC (LC) LED: 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, NTP, TFTP, TACACS+, Radius, Syslog, NetConf

In future release: RestConf & OpenConfig

### SOFTWARE UPGRADES

Traffic hitless software upgrades

*NOTE. THE INFORMATION IN THIS DOCUMENT IS VALID FROM RELEASE R7.0*

Subject to change without notice.

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

### 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: 55W

Max during power up: 75W

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.)