DCP-F-R22

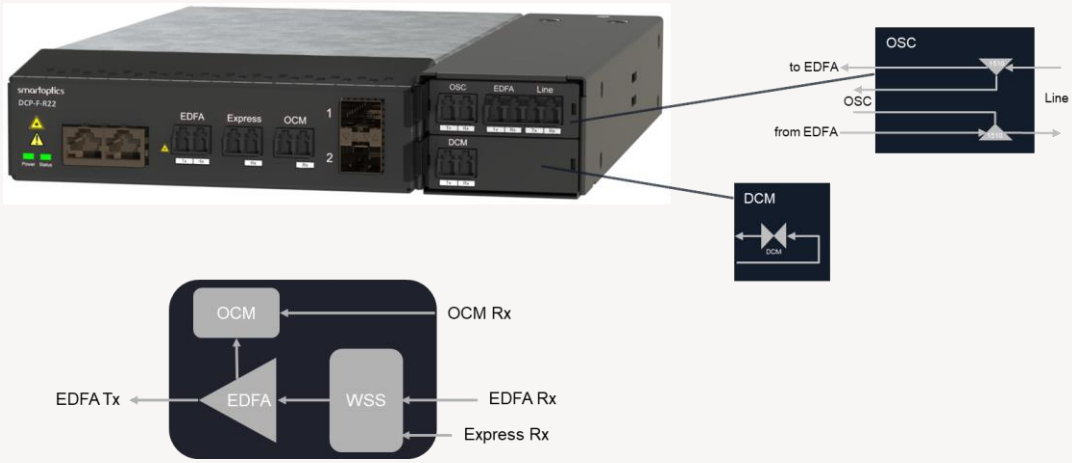
2-port ROADM, EDFA amplifier with 22 dB Gain, 2-Port Optical Channel Monitor, 1RU plug-in unit, with support for 2 x Passive Plug-in Modules (PPM's)

2-ROADM BUILDING BLOCK WITH EDFA AMPLIFIER AND CHANNEL MONITOR

The DCP-F-R22 is a member of the DCP-F family that is designed for maximum configuration flexibility with the active units available as individual modules plugged directly into the standard Smartoptics DCP-2 chassis, each module occupying one slot. The module also has an integrated expansion field for optional passive plug-in modules (PPM), used for example for dispersion compensation. The small footprint of the DCP-2 chassis and the pluggable configuration allows for excellent flexibility in various applications and in all types of network topologies. By combining one or more DCP-F units they can be used for different types of point-to-point applications, 2-degree ROADM applications and active/passive ring applications.

DCP-F-R22 IN SHORT

- EDFA Amplifier with an optimum gain of 22 dB
- 2-Port Optical Channel Monitor
- 2-Degree ROADM (WSS)
- Fits into one slot of the DCP-2 chassis
- One unit used per direction
- Support for 2 x Passive Plug-In modules (PPM)
- Available PPM modules
  - PPM for dual fiber 1510nm OSC filter (optional)
  - PPM's for 40 & 80 km DCM module (optional)
  - PPM's for 2% & 50% Optical couplers (optional)



ORDERING INFORMATION

DCP Series product codes	
DCP-F-R22	DCP-Series, 2-port ROADM, EDFA, Equalizer, Passive Plug-in Module (PPM), 1RU plug-in unit

TECHNICAL SPECIFICATIONS

PRODUCT CONFIGURATION

Active optical slot-in unit that is used to form an open line system for metro DWDM, DCI and dark fiber connectivity.

Supported encodings:
- 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 optical ports are of LC connector type

1 x EDFA input/output port
1 x Express input port
1 x Monitor input port

2 x RJ45 Management ports 10/100/1000 Base-T
2 x SFP Management port 1000 Base-X

VISUAL INDICATORS

Status LED Power & Alarm status
Line LED: Line Tx/Rx

REAR SIDE CONNECTIONS

Management and console ports (On the DCP-2 chassis)
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

MANAGEMENT PROTOCOLS

SSH/CLI, SNMP, NTP, TFTP, TACACS+, Syslog, Radius
In future release: REST, NetConf

SOFTWARE UPGRADES

Traffic hitless software upgrades

DIMENSIONS

Size (WxDxH)
1.73 x 8.07 x 10.63”
44 x 205 x 270mm
Weight: 1.8 Kg / 4 lbs

POWER CONSUMPTION

Typical consumption at 220VAC:
Normal operation: 40W
Max during power up: 45W

ENVIRONMENTAL

Operating temp:	0°C to +45°C
Cooling:	Front to back
Humidity:	5% to 85%
Altitude:	3000 m (10.000 ft)

OPTICAL SPECIFICATION

Amplifier:

Maximum total output Power:	20 dBm
Gain flattened optimized gain:	22 dB
Settable gain:	22-28 dB
Input power range:	-2 to -30 dBm
Noise figure:	5,5 dB

WSS:

WSS resolution:	6,25 GHz (Flexgrid)
WSS Min channel width:	37,5 GHz
WSS Min center freq:	191,25 THz
WSS Min center freq:	196,125 THz
WSS No channels (50 GHz):	96 (191,35 – 196,10 THz)
WSS No channels (100 GHz):	48 (191,3 – 196,1 THz)
WSS typical IL EDFA port:	5 dB
WSS typical IL Express port:	11 dB

OCM:

OCM resolution:	3,125 GHz (Flexgrid)
Power resolution:	0,1 dB
Min detection level (50 GHz):	-40 dBm
Accuracy:	+/-0,7 dB

Note. The information in this document is valid from release R6.0