

# DCP-F-DE22

Dual Equalizer, 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)

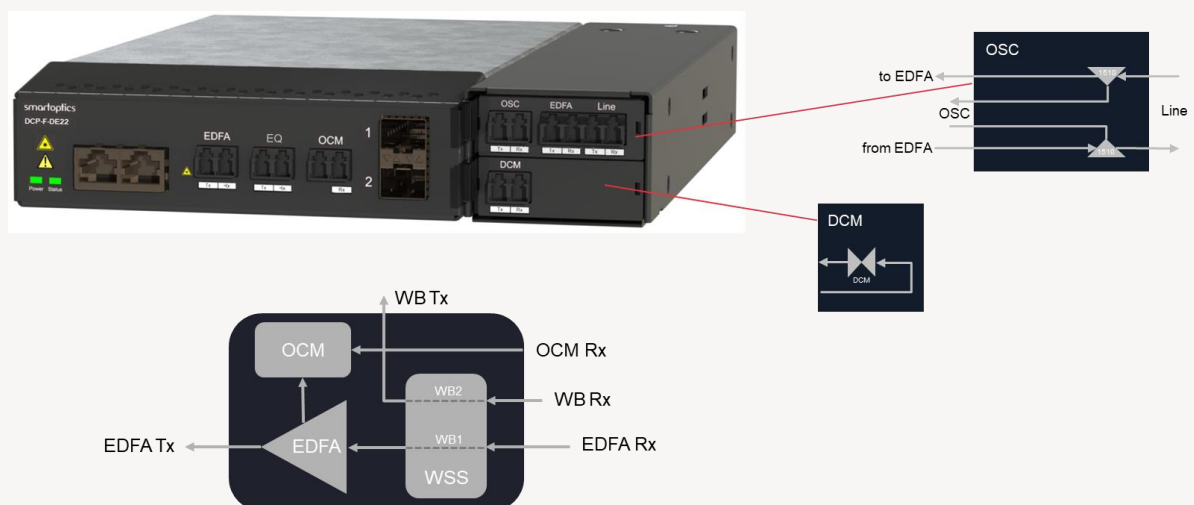


## DUAL EQUALIZER WITH EDFA AMPLIFIER AND CHANNEL MONITOR

The DCP-F-DE22 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-DE22 IN SHORT

- EDFA Amplifier with an optimum gain of 22 dB
- 2-Port Optical Channel Monitor, one built in and one external
- 2-Port Optical Equalizer, one built in and one external
- Fits into one slot of the DCP-2 chassis
- One unit can equalize two directions when combined with a DCP-F-A22
- Support for 2 x Passive Plug-In modules (PPM)
- Available PPM modules
  - PPM for dual fiber 1510nm & 1625nm OSC filter (optional)
  - PPM's for 20, 40 & 80 km DCM module (optional)
  - PPM's for 3% & 50% Optical couplers (optional)



## ORDERING INFORMATION

### DCP Series product codes

DCP-F-DE22

Dual Equalizer, EDFA amplifier, 2-Port OCM, with support for 2 x Passive Plug-in Modules (PPM's), 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 Wavelength Blocker (WB) input/output 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: 20-28 dB  
Input power range: -2 to -30 dBm  
Noise figure: 5,5 dB  
Laser Class: 1

#### WSS:

WSS resolution: 6,25 GHz (Flexgrid)  
WSS Min channel width: 37,5 GHz  
WSS Min center freq: 191,25 THz  
WSS Max 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: 4 dB  
WSS typical IL WB port: 4 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 R6.1*