CHAMPION ONE™

800.860.7466

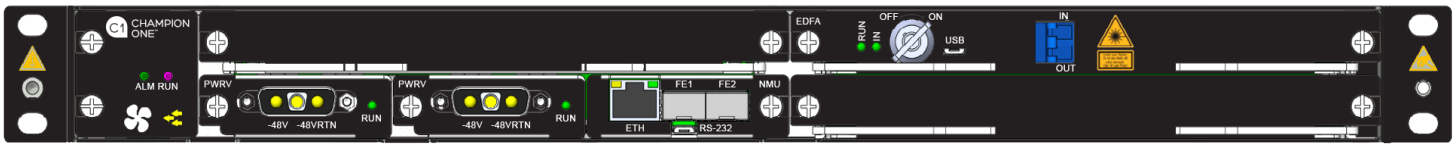
NETWORK ACCESSORIES DATA SHEET

3-Slot Multi-Functional Optical Transport Chassis

The C1 Optical Transport Chassis is the ideal complement to passive DWDM deployments that need help meeting the optical power budget or dispersion tolerance of DWDM optics. This 1RU chassis features an intelligent temperature control system, with an onboard fan card and redundant AC or DC power supplies available. The C1 OTC is a low-power, low-profile, and low-cost solution for long and/or lossy DWDM spans.

Technical Specifications

Parameter	Value
Part Number	FMC3-MSTP1U
Service Slots	3
Network Management Unit	1x RJ45 port (network management) 1x micro USB (local management)
Interface Support	RS232, Ethernet (10/100Mbps)
Alarm Port/Display	RJ45 output/LED
Power Supply	2x power modules on front panel (sold separately): • -48 VDC (**PN: FMC3-MSTP1U-DC48**) **OR** • 110-220 VAC (**PN: FMC3-MSTP1U-AC110**)
Fan Card Module	Intelligent temperature control system right-to-left airflow direction
Max Power Consumption (max, W)	75
Dimensions (in, WxDxH)	17.9 (w/o brackets) x 9.5 x 1.75 (brackets included in 19" rack)
Storage Temperature (°C)	-40 to 85
Operating Temperature (°C)	-5 to 55
Relative Humidity	5-95%



NETWORK ACCESSORIES DATA SHEET

Optical Booster Amplifier (EDFA) with Built-In VOA

Champion ONE's Erbium Doped Fiber Amplifier (EDFA) cards are available in pre-amp and booster amp versions. They offer up to 20dBm of output power, ideally suited for spans of 80km or more. Using a fixed 18dBm gain makes engineering, deploying, and maintaining these long spans nearly effortless. Perfect for long linear, point-to-point spans, network rings, or just about anywhere in your network topology.

Technical Specifications: Amplifier

Parameter	Value
Part Number	**FMC3-OBA20**
Wavelength Range (nm)	1529.55 – 1566.31 (ITU ch. 14-60)
Minimum Input Power (dBm)	-20
Saturation Input Power (dBm)	2
Output Power (max, dBm)	**20**
Gain (dB)	**18**
Noise Figure (max, dB)	5.5 (@2.0dBm input)
Gain Flatness (max, dB)	1.5
Pump Leak @ I/O (max, dBm)	-30
Return Loss (min, dB)	45
PMD (max, ps)	0.3
PDG (max, dB)	0.5
Connector Type	LC / UPC

Technical Specifications: Built-In VOA

Parameter	Value
Power Supply	AC or DC chassis
Wavelength Range (nm)	1525-1570
Configuration	Bright
Attenuation Range (max, dB)	30
Insertion Loss (typ/max, dB)	0.6 / 1.0
Tune Speed (max, ms)	5
Return Loss (max, dB)	45
Power Handling (max, mW)	500

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Optical Pre-Amplifier (EDFA)

Champion ONE's Erbium Doped Fiber Amplifier (EDFA) cards are available in pre-amp and booster amp versions. They offer up to 20dBm of output power, ideally suited for spans of 80km or more. Using a fixed 18dBm gain makes engineering, deploying, and maintaining these long spans nearly effortless. Perfect for long linear, point-to-point spans, network rings, or just about anywhere in your network topology.

Technical Specifications

Parameter	Value
Part Number	**FMC3-OPA20**
Wavelength Range (nm)	1529.55 – 1566.31 (ITU ch. 14-60)
Minimum Input Power (dBm)	-30
Saturation Input Power (dBm)	-5
Output Power (max, dBm)	**15**
Gain (dB)	**20**
Noise Figure (max, dB)	5.5 (@20dB gain)
Gain Flatness (max, dB)	1.5
Pump Leak @ I/O (max, dBm)	-30
Return Loss (min, dB)	45
PMD (max, ps)	0.3
PDG (max, dB)	0.5
Connector Type	LC / UPC
Power Supply	AC or DC chassis

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20km Dispersion Compensation Module

Champion ONE's dispersion compensation module (DCM) cards are designed to counteract the dispersion common in the 1525-1565nm wavelength range. Without compensatory measures, dispersion can severely limit transmission distance and bandwidth and lead to a high error rate.

Champion ONE's amplifiers are backed by a 5-year warranty.

Technical Specifications

Parameter	Value
Part Number	**FMC3-DCM-20KM**
Wavelength Range (nm)	1525 - 1568
1525nm Dispersion (typ, ps/nm)	-303 +/-10 (@ 20km)
1545nm Dispersion (typ, ps/nm)	-328 +/-9 (@ 20km)
1568nm Dispersion (typ, ps/nm)	-355 +/-11 (@ 20km)
RDS@1545nm (nm-1)	0.0036 +/- 10%
Insertion Loss (typ/max, dB)	2.7 / 3.3
PMD (typ/max, ps)	0.2 / 0.4
WDL (max, dB)	0.5
PDL (max, dB)	0.1
IL Variation (min/max, dB)	-0.5 / 0.5 (at -5 to 70 C)
Dispersion Variation (min/max)	-0.70% / 0.70% (at -5 to 70 C)