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**Mini-CWDM Module**



Wavelength Division Multiplexers or Demultiplexers (WDM) combine or separate optical signals with different wavelengths. They are passive optical components for uni- or bidirectional operation.

The FOC Mini CWDM modules are based on the TFF technology. They integrate up to 8 CWDM channels and one optional extension port. The modules are based on a complex and stable internal structure drastically reducing their footprint in comparison with other solutions. They combine excellent climatic stability, low attenuation and high long-term reliability in line with TELCORDIA requirements.

**Features**

- Low Insertion Loss and high channel isolation
- Compact basic design for optimum system integration
- High Return Loss
- High thermal, mechanical and environmental stability to meet the requirements of Telcordia GR-1209 and GR-1221
- Option of manufacture to customer specifications

**Applications**

- CWDM transmission systems
- Link monitoring
- Add-Drop-Multiplexing
- Metropolitan networks
- CATV systems

**Designs**

- Supplied in various housing sizes with buffered tube pig-tails or reinforced cable pigtails
- All connector standard types are available

For check lists and additional ordering information for our products visit our website or see separate data sheets.



**Optical parameter**

Parameter	4 - channel CWDM	4+1- channel CWDM	8 - channel CWDM	8+1- channel CWDM
	Value		Value	
Center wavelength CWDM channels <sup>(1)</sup> [nm]	custom-made		custom-made	
Channel spacing CWDM channels [nm]	20		20	
Bandwidth CWDM channels [nm]	≥13		≥13	
Max. Insertion Loss CWDM channels <sup>(2,4)</sup> [dB]	1,0		1,5	
Max. Insertion Loss Upgrade channel <sup>(4)</sup> [dB]	-	1,0	-	1,5
Min. Isolation CWDM channels [dB]	30		30	
Min. Isolation Upgrade channel [dB]	-	30	-	30
Max. Ripple CWDM channels [dB]	0,3		0,3	
Min. Return Loss [dB]	45		45	
Max. Polarisation Dependent Loss (PDL) [dB]	0,2		0,2	
Max. Input Power [mW]	500		500	
Temperature Range [ °C]	Operation <sup>(3)</sup> Storage/Transportation		-20 to +70 -40 to +85	
Temperature Dependent Loss (TDL) [dB/°C]	≤0,005		≤0,005	
Thermal wavelength change [nm/°C]	≤0,003		≤0,003	

<sup>(1)</sup> All center wavelengths according to ITU-T G.694.2 (CWDM grid) available

<sup>(2)</sup> Typical 0.8dB for 4- and 4+1-channel CWDM / typical 1dB for 8 and 8+1-channel CWDM

<sup>(3)</sup> For 900µm solid core optical fiber pigtailed, value depending on pigtail design

<sup>(4)</sup> Without connectors

**Dimensions**

