# ULTRA-WIDEBAND OPTICAL CHANNEL MONITOR

# **UWB-OCM**

The ultra-wideband optical channel monitor (UWB-OCM) product is ideal for original equipment manufacturers that require a single DWDM monitoring solution for one or more of C, L, C++, L++ or C+L optical transmission bands. The OCM incorporates Coherent's proprietary METOD ultra-wide scanning tunable optical filter technology platform.

The UWB-OCM leads the industry with an optical frequency measurement range of 10 THz (expandable up to 12 THz) for a single device, and a wide optical power measurement range from 0 dB to -40 dBm. The OCM incorporates a multi-port switch for monitoring of up to 4 locations, and an internal ultra-wideband wavelength reference for accurate frequency measurements of flex-grid channels across the entire monitoring range.



# **FEATURES**

- Ultra-wide measurement range
- Large power measurement range
- Modulation-independent power reporting
- Accurate frequency reporting
- Multi-port monitoring
- RoHS compliant

# **APPLICATIONS**

- Ultra-high-capacity system monitoring
- Monitoring of C/L/C++/L++/C+L WDM grids
- ROADM/OADM equalization
- Smart amplifier gain equalization
- Remote power monitoring & control
- Automated provisioning & maintenance



## **ULTRA-WIDEBAND OPTICAL CHANNEL MONITOR**

## **Product Specification**

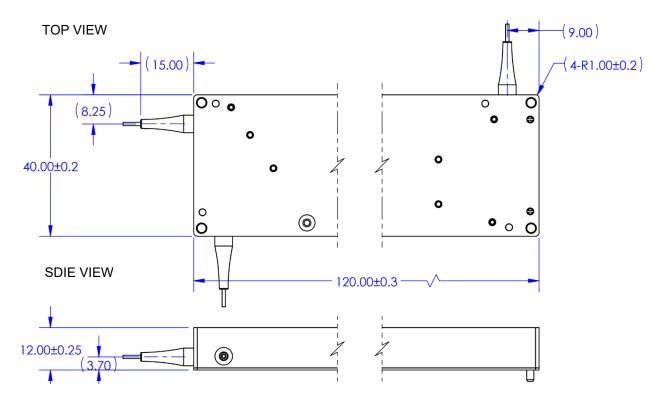
Optical Characteristics		Min	Max	Units
Absolute Power Accuracy <sup>1</sup>	ΔΡ	-1.0	+1.0	dB
Relative Power Accuracy <sup>1</sup>	δΡ	-	1.0	dB
Absolute Frequency Accuracy <sup>2,3</sup>	Δf	-3.25	+3.25	GHz
Power Repeatability <sup>3</sup>	PR	-0.5	+0.5	dB
Polarization Dependent Loss	PDL	-	0.5	dB
Optical Return Loss	RL	30	-	dB

Operating Conditions	Min	Max	Units
Tuning Range	-	10	THz
WDM Bands supported	C/L/C++/L++/C+	_	
Maximum Number of Channels⁴	-	200	
Modulation Formats, Bit Rates	Independent		
Input Signal Power Range <sup>1</sup>	-40	0	dBm
Maximum Input Power		10	dBm
Adjacent Channel Power Divergence <sup>4</sup>	-	8	dB
Channel Power Divergence Over All Channels⁴	-	15	dB
OSNR Range⁵	5	-	dB
Temperature Range <sup>6</sup>	-5	60	С
Spectrum update period	-	500	ms
Power consumption	-	12	W
Number of Ports	-	4	
Dimensions (LxWxH)	120x40x12		mm

- 1. Power measured in 50 GHz bandwidth
- 2. For signals with spectral peak-to-valley > 3 dB for RBW = 0.2 nm
- 3. Single channel measurement, fixed state-of-polarization
- 4. Channel spacing of 50 GHz
- 5. OSNR = total signal power / noise power in 0.1 nm RBW
- 6. Ambient temperature with suitable airflow



## **Product Dimensions (Draft)**



### **DIMENSIONS IN MILLIMETERS**

Note: there are three options on the direction of fiber ingress.

### **Ordering Information**

Coherent PN	CPN	Description	Minimum Order Quantity
606010001	TBD	UWB-OCM optical channel monitor	1 pc

### **RoHS Compliance**

Coherent Corp. is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

