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Optical Performance Monitor

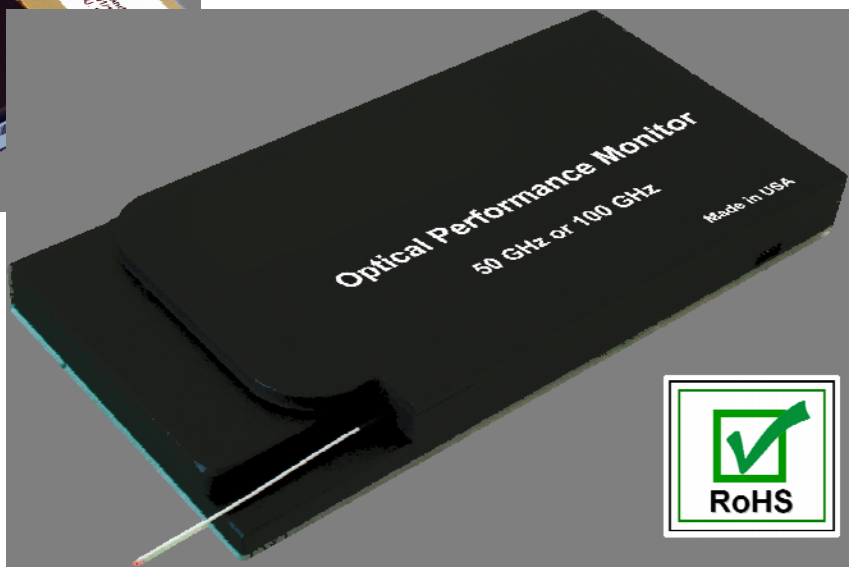
CAOG's **Optical Performance Monitor** (OPM), also known as **Optical Channel Monitor** (OCM), uses proprietary thin-film filter technology combined with a micro-actuator and intelligent firmware. OPM/OCM measures critical information on optical transmission signals in DWDM networks for monitoring signal dynamics, determining system functionality, identifying performance change, and providing feedback for controlling network elements so as to optimize performance. In particular, CAOG's OPM/OCM can automatically scan the C-band, L-band and C+L-band wavelength range and precisely measure channel wavelength, power, and optical signal-to-noise ratio (OSNR).

Key Features and Benefits

- High dynamic range
- Low temperature sensitivity
- High power and wavelength accuracy
- Built-in wavelength reference
- Wide wavelength coverage
- Compact size

Applications

- Optical performance monitoring of DWDM systems
- Optical add/drop monitoring
- Optical power or OSNR monitoring for gain equalization
- System alarms or error warnings
- Portable OSA/Spectrometer



Telcordia

GR-468 Qualified

OPM/OCM Standard Product Datasheet[1]

Parameter	Unit	50 GHz	100 GHz
Wavelength Range	nm	C-, L- or C+L-band	
Channel Number (for C- or L-band)	-	85	43
Adjacent Channel Power Difference	dB	< 13	< 15
Non-Adjacent Channel Power Difference	dB	< 20	
Minimum Spacing Between Channels	GHz	40	75
Maximum Input Power	dBm	23	
Channel Input Power Range	dBm	–10 ~ –40	
Absolute Channel Power Accuracy	dB	± 0.5	
Relative Channel Power Accuracy	dB	± 0.3	
Power Measurement Repeatability	dB	± 0.1	
PDL	dB	< 0.3	
Absolute Wavelength Accuracy	pm	± 50	
Relative Wavelength Accuracy	pm	± 30	
Channel Wavelength Resolution	pm	20	
OSNR[2]	dB	> 25	> 28
OSNR Accuracy[2]	dB	± 1.5	
Noise Floor	dBm	–60	
Response Time	ms	< 200 (Power & Wavelength)	
		< 500 (Power, Wavelength & OSNR)	
Power Consumption	W	< 2	
Operating Temperature	°C	–5 ~ 65	
Storage Temperature	°C	–40 ~ 85	
Electronics Interface	-	RS232 or DPRAM	
Standard Dimension (L×W×H)[3]	mm	100×70×17.5 or 220×110×25	

Notes:

1. Certain parameter specs can be varied based on customer demands.
2. Optional feature.
3. Including PCB.