

OPTICAL SPECTRUM ANALYZERS
CMA5000 OSA 425 / OSA 400

1250 nm to 1650 nm



Field Portable DWDM/CWDM Testers



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The CMA5000 OSA's are field portable DWDM/CWDM testers covering the 1250-1650 nm spectral range. Two OSA modules are available to meet all test requirements: OSA 400 and OSA 425.

OSA 425

This OSA is ready for field operation and harsh environment. Its internal calibration valid over all temperature range gives you accurate power and wavelength measurement in all conditions without any user calibration.

OSA 400

The OSA 400 extends the performances of the OSA 425 and provides lab specifications in a rugged field module. With best in class ORR, this OSA can compute OSNR measurements with very high accuracy. The unique flat top filter can drop signal up to 40Gb/s to do transport analysis. The compact size of the OSA module conveniently fits into the CMA5000 Multi-Layer Network Test Platform using a medium bay adapter.

Specifications

	OSA 400	OSA 425
Spectral Range	1250-1650 nm	1250-1650 nm
Wavelength Accuracy ¹	±40 pm (± 20 pm typical)	±40 pm (± 20 pm typical)
Power Range ^{2,3,4}	+20 to -70 dBm	+15 to -65 dBm
Power Accuracy ⁵	±0.4 dB	±0.5 dB
Polarization Dependence ⁶	±0.05 dB	±0.1 dB
Resolution Bandwidth ³	<60 pm; 100 pm; 200 pm & 500 pm	<70 pm
Optical Rejection Ratio ^{3,7}	65 dBc at ±50 GHz from peak 55 dBc at ±25 GHz from peak 35 dBc at ±12.5 GHz from peak	40 dBc at ±50 GHz from peak 35 dBc at ±25 GHz from peak 25 dBc at ±12.5 GHz from peak
Measurement Time at Full Resolution	8s for full scan 40 nm/s for small scan	8s for full scan 40 nm/s for small scan
Channel Table	512	512
Optical Return Loss	> 45 dB	> 40 dB

Channel Drop Features

Spectral Range	1250-1650 nm	NA
Modulation Rate	Up to 40 Gb/s	NA
Filter Bandwidth ³	From 60 pm to 800 pm	NA
Crosstalk ³	Up to 65 dB	NA

¹ Signal from +5 to -30 dBm in C&L band from 15°C to 30°C

² Maximum total safe power +25 dBm

³ In C&L band

⁴ With averaging; linearity may be degraded above +15 dBm

⁵ At -15 dBm in C band

⁶ At 1550 nm; at 23°C ±2°C

⁷ With the 60 pm resolution

Specifications are subject to change without notice

General Specifications

Operating Temperature	0°C to +40°C
Storage Temperature	-20°C to +70°C
Humidity	95% RH non-condensing
Battery Operation	Yes

Ordering Information

For the most current ordering information, please visit our website.