

OPTICAL POWER METER SYSTEM

OPMS Model, Single Mode Fiber



High-Density, High-Speed Optical Power Meter

The new DiCon Optical Power Meter System product family — fully integrated with the GP800 platform — is a high-density optical power monitoring solution engineered for demanding network testing, production line automation, and laboratory environments. Supporting extreme scaling up to 384 channels (via MTP connectors) in a 1U height, this module delivers unparalleled density without sacrificing accuracy or structural reliability.

10 kS/s Data Logging

To meet the needs of transient analysis, polarization scrambling tracking, and high-speed optical switching verification, the OPMS family introduces a dedicated **10 kS/s Data Logging Feature**.

By bypassing standard firmware loops and leveraging dedicated high-speed RAM, our OPMS family achieves a rapid **100 μs sampling interval**. This simultaneous, multi-channel capability ensures you never miss transient spikes, switching anomalies, or polarization changes that standard power meters often overlook.

Key Features & Performance Highlights

- **Ultra-High Density Scaling:** Configurable architectures supporting 96 (LC), 128 (MTP), or up to 384 (MTP) total power meter channels within a compact footprint.
- **High-Speed Data Logging & Buffer:** Fully customizable averaging times from 100 μs to 1 second, capturing up to 1,024 synchronized data points per channel across 48 channels simultaneously.
- **Flexible Sampling & Calibrated Precision:** Seamless logging windows from 102.4 ms to 1,024 seconds, with all data returned as fully calculated, absolute optical power levels in dBm units.
- **Easy Integration & Automation:** Equipped with RS232 and two Ethernet interfaces, making it effortless to automate workflows and synchronize with other laboratory instruments.

Applications

- Transient & Glitch Detection
- Automated Production Testing
- Optical Switch Characterization

ORDERING INFORMATION

OPMS - ☐ - 9 - ☐ - ☐

Configuration

- 96 96 Channels
- 128 128 Channels
- 384 384 Channels

Fiber Type

- 9 9/125 μm SMF

**Other fiber options are available upon request*

Power

- A1 AC 100-240V Single
- D1 DC -48V Single
- A2 AC 100-240V Redundant
- D2 DC -48V Redundant

Bulkhead Connector Type

- LC LC/UPC
- LC/APC LC/APC
- M24F MTP-24 Female APC
- M24M MTP-24 Male APC

**Other connector types are available upon request*

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OPTICAL SPECIFICATIONS¹

Operating Wavelength		1260 to 1680 nm
Dynamic Range		-67 to 5 dBm
Relative Accuracy		+/- 0.2 dB max.
Absolute Accuracy		+/- 0.5 dB max.
Data Logging Capability ²	OPM-96	12 channels
	OPM-128	16 channels
	OPM-384	48 channels
Data Logging Averaging Time		100 μ s to 1 s
Damage Threshold		27 dBm

1. All specifications are measured separately at room temperature for each Test Wavelength, excluding connectors.

2. The channels with data logging capability are highlighted in the front panel.

ELECTRICAL SPECIFICATIONS

Power Consumption ³	< 26 W Steady State < 50 W at Startup
Power Supply Options	Redundant Power Supply, 100-240 VAC or -48 VDC
Network Interface Card	RJ45 Dual Redundant Gigabit Ethernet
SDN & Automation Interfaces	REST API, NETCONF, SNMPv3, TL1, Web GUI, RS232, gNMI, gRPC

3. OPMS-384 with Redundant AC Power Unit

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

MECHANICAL SPECIFICATIONS

Chassis Width	483 mm (19")
Chassis Depth	559 mm (22")
Chassis Height	44 mm (1.7"), 1U

