DiCon Fiberoptics, Inc.

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 - □ - □ - □

Chassis Type

1U	1U
2U	2U

**Please consult DiCon*

Chassis Depth

17	17”
22	22”

**Please consult DiCon*

Configuration

96	96 Channels
128	128 Channels
384	384 Channels

Fiber Type

9	9/125 µm SMF

**Other fiber options are available upon request*

Test Wavelength

O	1310 nm
C	1550 nm
L	1590 nm

**Use "/" to add multiple wavelengths. E.g., O/C or O/C/L*

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
M12F	MTP-12 Female APC
M12M	MTP-12 Male APC
M24F	MTP-24 Female APC
M24M	MTP-24 Male APC

**Other connector types are available upon request*

TAA COMPLIANT

DiCon® FIBEROPTICS

OPTICAL POWER METER SYSTEM

OPMS Model, Single Mode Fiber

OPTICAL SPECIFICATIONS[1]

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

1. All specifications are measured separately at room temperature for each Test Wavelength across the Operating Power Range, excluding connectors.
2. The channels with data logging capability are highlighted in the front panel.

ELECTRICAL SPECIFICATIONS

Power Consumption[3]	26W max. Steady State 50W max. at Startup
Power Supply Options	Redundant Power Supply, 100-240 VAC or -48 VDC
Network Interface Card	RJ45 Dual Redundant Gigabit Ethernet
Control Interface	REST API, Web GUI, RS232, NETCONF, SNMPv2c, SNMPv3, TL1, gNMI, gRPC, Telnet, SSH

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	435 mm (17”) 559 mm (22”)
Chassis Height	44 mm (1.7”), 1U 88 mm (3.5”), 2U

WEB GUI DATA LOGGING VIEW

- Optical Transitions Measurement

