

# Power Monitor OPM500

The flexible one!



## Highlights:

- Flexible setup
- Easy to use
- Powerful

## Our offer in Detail:

The OPM500 is a versatile power monitor for use in the lab and for laser servicing as well as for OEM applications. This instrument can be delivered with a fibre input (as depicted above) or for a free beam input. Functional control is via the USB interface or via the DB25 hardware interface for direct, sub  $\mu$ s control of all parameters. This feature is useful for OEM implementation in feedback loops such as fibre alignment applications.

Detectors are available covering 190-1100nm, 800-1550nm, 800-1650nm and 400-1600nm.

The graphical user interface is intuitive to use and easy to read! The software includes a scope function, data logging and a large, digital display-perfect for daily use in the lab or in the field. Further functions such as autogain and various storage formats are also included.

The OPM500 is small and is USB controlled. Not only the small size qualifies this instrument for OEM applications. It is very simple and flexible to integrate into your project. The unit comes delivered with drivers for direct communication or to be used as a virtual COM-port. Furthermore, we provide a full software development kit including the source code for the GUI application as well as a demo LabView-VI®.

## Specifications

- USB controlled
- 30 Hz update rate with GUI, 1000 Hz as data logger
- 6 gain ranges from 100nW to 3mW full scale (30pWNEP!)
- Selectable bandwidth limitation



Your problem is our challenge-flexibility is our standard:

We will gladly adapt, for example, the wavelength or the case style to suit your application. Let us know your requirements.

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	Option	Description
Casestyle(c):	G	OEM style <sup>1</sup>
	L	Lab style
Diodematerial(d):	UVS	190-1100nm
	G	800-1550nm
	IGA	800-1650nm
	VIGA	400-1600nm
	xIGA	800-2100nm
Inputreceptacle(r):	F	FC fibre coupled
	S	SMA fibre coupled
	B	free beam
Numberofchannels(n):	1-16	

## Specifications

Parameter	Conditions	SI, INGAAS			GE			Units
		Min	Typ	Max	Min	Typ	Max	
<b>Input</b>								
Power ranges (fullscale)			+5 <sup>2</sup> 0 -10 -20 -30 -40			+15 +10 0 -10 -20 -30		dBm
Noise equivalent power (NEP <sub>RMS</sub> )	Range 1-5 Range 6			full scale -45 -75			full scale -32 -62	dB dBm
Receptacles		FC, FSMA, free beam			*			
<b>Output</b>								
Function		Line ar analogue: $V_{out} = scale \times P_{in}$						
Output scale	Range 1 Range 2 Range 3 Range 4 Range 5 Range 6		1 <sup>2</sup> 10 100 1 10 100			0.1 1 10 0.1 1 10		V/mW  V/μW
Output Range (fullscale)				10			*	V
Connectors		BNC and DB9			*			
Rise / Fall time(10%-90%)	Small signal (-1→+1V) Large signal (-10→+10V)			45 65			*	μs
Accuracy		± 5			*			%
Reproducibility		± 0.5			*			%
Linearity			± 0.1	± 0.2		*	*	dB
<b>Logic</b>								
Current required for switching		-10	0.01	10	*	*	*	μA
Switching time				50 <sup>3</sup>			*	μs
<b>Dimensions</b>								
	1 channel	105 <sup>4</sup> x 45 x 116 mm (w x h x l)			*			mm

<sup>1</sup> Small OEM-style case with gull wings for mounting

<sup>2</sup> linearity guaranteed to 0dBm (1 mW)

<sup>3</sup> Logic switching < 1μs. Effective switching time limited by settling time.

<sup>4</sup> 130mm including case wings