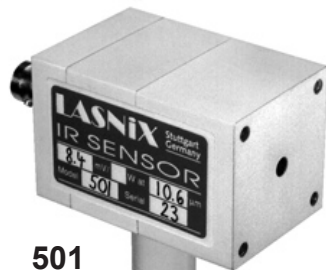


POWER SENSORS for INFRARED LASER BEAMS

THz QCL CO₂ FEL OPO HF Telecom Nd:YAG Ti:S



502



501

very simple
and 10 ms fast

The power sensors contain a very fast thermopile and an integrating cavity that accepts 50 W c.w. input. The response time of 1/100 s is much shorter than in any traditional power meter. No battery is required. The output is true d.c. analog and reads into any multimeter, scope or ADC computer card. Incoming laser radiation is diffused in the cavity before it reaches the thermopile; thus the response is highly independent of the beam shape and polarization.

The basic sensor Mod. 501 has a 4 mm aperture to accept an even sharply focused beam. Heat sinking is not necessary for continued operation below 10 W, but is recommended above. One M8 and four M4 tapped mounting holes are provided at the base.

The extended Mod. 502 has an integral convective heat sink for stand-alone use up to 50 W, and a 20 mm aperture that accepts a collimated beam (within ±4°).

- spectral range 1 - 20 μm
- power range < 1 mW - 50 W
- response time 0.01 s
- responsivity > 5 mV/W
- dynamic range > 50 db
- output resistance 50 kΩ
- output connector BNC
- diffuse reflectance 7 %
- maximum power density not limited
- maximum pulse energy 1 J (50 ns)
- spatial sensitivity variation 2 %
- linearity -5 % (5 W)
-10 % (50 W)
- operating temperature -20 - 80 °C

A p p l i c a t i o n s :

laboratory & OEM power meter

fast power stabilization

Model No.	Clear Aperture	Length	Height	Width	Weight
	mm	mm	mm	mm	g
501	4	54	35	35	130
502	20	50	108	82	700

For ordering write or call

LASNIX
Sonnenweg 32
82335 Berg
Germany

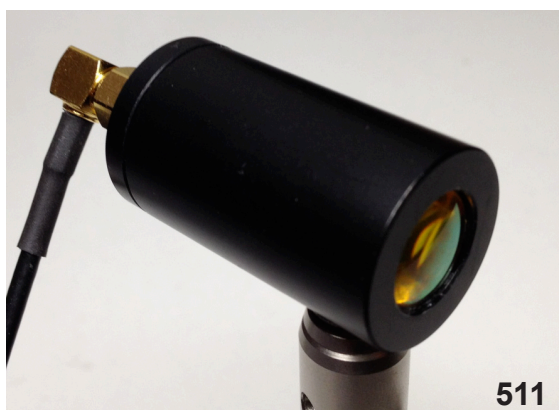
www.lasnix.com

Phone: +49 (0) 8151 953036
Fax: +49 (0) 91130844 88883
Email: info@lasnix.com

μW POWER SENSORS for MID-IR LASER BEAMS

QCL CO₂ CO FEL DFG OPO

very simple
and 10 ms fast



The power sensor contains a very fast thermopile, a low-pass filter, and a ZnSe lens. It accepts collimated (within ±2°) input beams with up to 12 mm diameter. The response time of 1/100 s is much shorter than in any traditional power meter. No battery is required. The output is true d.c. analog and reads into any multimeter, scope or ADC computer card. SMA output connector.

For mounting, a tapped hole M4 is provided at the base.

- spectral range 3.7 - 20 μm
 optionally..... 1.9 - 100 μm
- power range < 0.001 - 100 mW
- response time..... 0.02 s
- responsivity > 5 V/W
- dynamic range..... > 45 db
- output resistance 50 kΩ
- output connector SMA
- maximum pulse energy 1 mJ (50 ns)
- blocked range..... 0.3 - 3.5 (1.8) μm
- max. power in blocked range 1 W
- linearity -5 % (10 mW)
 -10 % (100 mW)
- operating temperature -20 - 80 °C

A p p l i c a t i o n s :

laboratory & OEM power meter

fast power stabilization

Model No.	Clear Aperture	Length	Height	Width	Weight
	mm	mm	mm	mm	g
511	12	38	22	22	40

For ordering write or call

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