

## UP55M-200W-VR-D0

Thermal detector for laser power measurement up to 200 W.



#### PRODUCT FAMILY KEY FEATURES

# THIS PRODUCT HAS BEEN SUPERSEDED. CHECK THIS PAGE FOR THE NEW PRODUCT.

#### MODULAR CONCEPT

Increase the power capability of your detector: 4 different cooling modules

#### HIGH PEAK POWER VOLUME ABSORBER

- · Perfect for high density beams
- Average power density of 700 W/cm<sup>2</sup> prevents degradation caused by repetitive pulses

#### LARGE APERTURE

55 mm aperture to accomodate the largest beams

#### HIGH AVERAGE POWER

Up to 200 W of continuous power with the watercooled unit

#### **ENERGY MODE**

Measure single shot energy up to 500  ${\tt J}$ 

#### SMART INTERFACE

Containing all the calibration data

#### **COMPATIBLE STAND**

STAND-S-443

## **SPECIFICATIONS**

MEASUREMENT CAPABILITIES	
Maximum average power (continuous) <sup>1</sup>	200 W
Maximum average power (1 minute) <sup>2</sup>	200 W
Noise equivalent power <sup>3</sup>	15 mW
Spectral range <sup>4</sup>	0.3 - 2.5 μm
Typical rise time <sup>5</sup>	4 s
Power calibration uncertainty <sup>6</sup>	±2.5 %
Repeatability	±0.5 %

- 1. Minimum cooling flow 1 liters/min, water temperature  $\leq$  22°C, 1/8 NPT compression fittings for 1/4 inch semi-rigid tube. Contact Gentec-EO for clean deionized water cooling module option.
- 2. Minimum cooling flow 1 liters/min, water temperature  $\leq$  22°C, 1/8 NPT compression fittings for 1/4 inch semi-rigid tube. Contact Gentec-EO for clean deionized water cooling module option.
- 3. Nominal value, actual value depends on electrical noise in the measurement system.
- 4. This spectral range refers to the calibration traceability.
- 5. With anticipation.
- 6. Including linearity with power.

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### MEASUREMENT CAPABILITIES (ENERGY MODE)

Maximum measurable energy <sup>1</sup>	500 J
Noise equivalent energy <sup>2</sup>	0.25 J
Minimum repetition period	11.1 s
Maximum pulse width	433 ms
Energy calibration uncertainty <sup>3</sup>	±5 %

- 1. For 360  $\mu s$  pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- 2. Nominal value, actual value depends on electrical noise in the measurement system.
- 3. When single-shot energy calibration is purchased

### DAMAGE THRESHOLDS

Maximum energy density <sup>2</sup>	6 J/cm²
1. At 1064 nm, 10 W CW. May vary with wavelength and average power. 2. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width.	
PHYSICAL CHARACTERISTICS	
Cooling	Water
Aperture diameter	55 mm
Absorber	VR
Dimensions	119H x 89W x 43D mm
Dimensions Weight	119H x 89W x 43D mm 0.84 kg
Weight	
Weight ORDERING INFORMATION	0.84 kg
Weight ORDERING INFORMATION UP55M-200W-VR-D0	0.84 kg 201291

Maximum average power density<sup>1</sup>

 $700 \ W/cm^2$ 

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

## **INTERESTED IN THIS PRODUCT?**

GET A QUOTE

Find your local sales representative at gentec-eo.com/contact-us