

# 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THIS PRODUCT HAS BEEN SUPERSEDED.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  ${\rm J}$ 

#### 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 < 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 < 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.

#### 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 µs 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 average power density <sup>1</sup>	700 W/cm²
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
Weight	0.84 kg
ORDERING INFORMATION	
UP55M-200W-VR-D0	201291
UP55M-200W-VR-IDR-D0	203375
UP55M-200W-VR-INT-D0	203067
UP55M-200W-VR-BLU-D0	203688

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