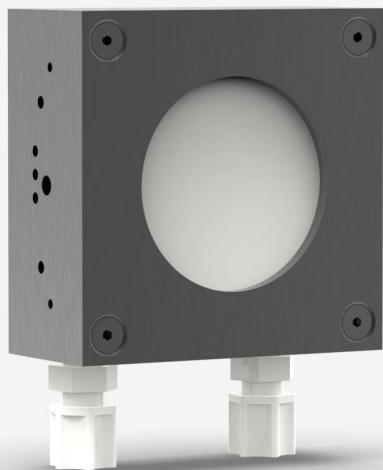


## UP55M-200W-VR-D0

Thermal detector for laser power measurement up to 200 W.



### KEY FEATURES

#### 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 accommodate 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 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 sec
Typical power sensitivity <sup>6</sup>	0.04 mV/W
Power calibration uncertainty <sup>7</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. Into 100 kΩ load. Maximum output voltage = sensitivity x maximum power.

7. Including linearity with power.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

Typical energy sensitivity	0.01 mV/J
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/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	6 J/cm <sup>2</sup>

1. At 1064 nm, 10 W CW.  
2. At 1064 nm, 7 ns, 10 Hz.

## PHYSICAL CHARACTERISTICS

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

INTERESTED IN THIS PRODUCT?

GET A QUOTE

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