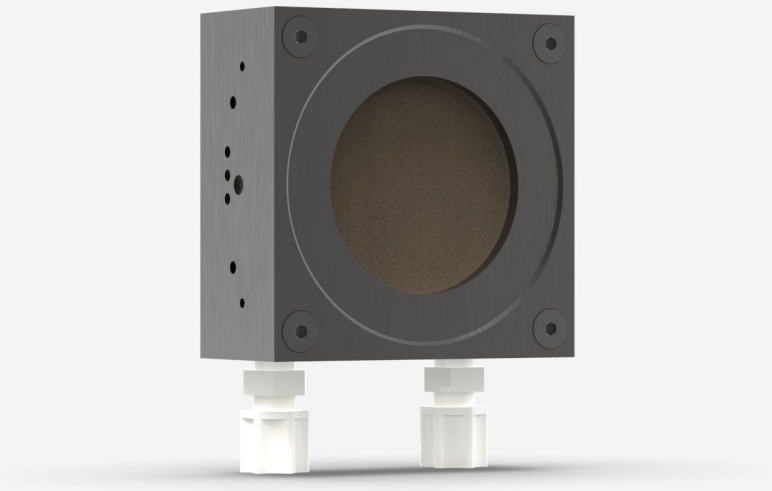
UP55M-700W-HD-D0

Thermal detector for laser power measurement up to 700 W.



PRODUCT FAMILY KEY FEATURES

HIGH DENSITY ABSORBER

The HD absorber is the strongest on the market for use at high powers, presenting both high average power handling and high power density capabilities.

FAST AND COMPACT

A very compact detector that measures up to 700 W of continuous power.

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

STAND-S-443

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous)[1]	700 W
Maximum average power (1 minute)[2]	700 W
Noise equivalent power[3]	45 mW
Spectral range[4]	0.193 - 20 µm
Typical rise time[5]	2.8 s
Power calibration uncertainty[6]	±2.5 %
Repeatability	±0.5 %

1. Minimum cooling flow 1.5 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 1.5 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. For the calibrated spectral range, see the user manual.
5. With anticipation.
6. Including linearity with power.

MEASUREMENT CAPABILITIES (ENERGY MODE)

Maximum measurable energy[1]	200 J
Noise equivalent energy[2]	0.25 J
Minimum repetition period	12 s
Maximum pulse width	430 ms
Energy calibration uncertainty[3]	±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[1]	45 kW/cm²
Maximum energy density[2]	1 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	HD
Dimensions	119H x 89W x 43D mm
Weight	0.9 kg

ORDERING INFORMATION

UP55M-700W-HD-D0	201908
UP55M-700W-HD-INT-D0	203199
UP55M-700W-HD-IDR-D0	205132
UP55M-700W-HD-BLU-D0	203724

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