

UP55C-2.5KW-HD-D0

Thermal detector for laser power measurement up to 2500 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.

PERFORMANCE AND SPEED AT A LOW PRICE

Measures both very low and very high powers (up to 2 500 W) with a fast response time. A compact and versatile detector that is more affordable than any other high power solution on the market.

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

[STAND-S-443-C](#)

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous) ¹	2500 W
Maximum average power (1 minute) ²	2500 W
Noise equivalent power ³	200 mW
Spectral range ⁴	0.193 - 20 μm
Typical rise time ⁵	3.5 s
Typical power sensitivity ⁶	8 V/W
Power calibration uncertainty ⁷	±2.5 %
Repeatability	±0.5 %

1. Minimum cooling flow 3 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 3 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. Into 100 kΩ load. Maximum output voltage = sensitivity x maximum power.

7. Including linearity with power.

DAMAGE THRESHOLDS

Maximum average power density ¹	45 kW/cm ²
Maximum energy density ²	1 J/cm ²

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	116H x 116W x 37D mm
Weight	3.3 kg

ORDERING INFORMATION

UP55C-2.5KW-HD-D0	202174
UP55C-2.5KW-HD-BLU-D0	203543
UP55C-2.5KW-HD-INT-D0	203195
UP55C-2.5KW-HD-IDR-D0	205133

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