

## UD55-500-H12

Uncalibrated thermal disk sensor for laser power measurement up to 500 W.



### PRODUCT FAMILY KEY FEATURES

#### DESIGNED FOR INTEGRATION

With a broad bandwidth and high power densities

#### VERY THIN PROFILES

Starting at only 2 mm in thickness

#### VARIOUS APERTURE SIZES

Choose your aperture from 10 mm to 55 mm.

#### 2 LEVELS OF INTEGRATION

- Disk alone
- Disk + PCB

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Maximum average power	500 W
Maximum average power (fan-cooled)	300 W
Noise equivalent power	15 mW
Spectral range	0.19 - 20 $\mu\text{m}$
Typical rise time <sup>1</sup>	18 s
Typical power sensitivity <sup>2</sup>	0.06 mV/W
Recommended load impedance	100 k $\Omega$

1. These characteristics depend on the thermal management and electronics provided by the user. Packaging, cooling and electronics similar to our UP series detectors will provide similar performances. See UP series specifications sheets for more details. Actual performance depends on the tradeoffs in a user's design. It may be possible to enhance some performance parameters at the expense of others.

2. Without anticipation algorithm or circuitry.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

Typical energy sensitivity	0.015 mV/J
Maximum measurable energy <sup>1</sup>	200 J
Noise equivalent energy	250 mJ

1. For 360  $\mu\text{s}$  pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).

### DAMAGE THRESHOLDS

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

1. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width.

### PHYSICAL CHARACTERISTICS

Absorber	H12
Dimensions	85 $\varnothing$ x 4D mm
Weight	0.039 kg

### ORDERING INFORMATION

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](http://gentec-eo.com/contact-us)