UD55-500-H12

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

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 µm
Typical rise time[1]	18 sec
Typical power sensitivity[2]	0.06 mV/W
Recommended load impedance	100 kΩ
Maximum divergence	

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[1]	200 J
Noise equivalent energy	250 mJ

1. For 360 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).

DAMAGE THRESHOLDS

Maximum average power density	45 kW/cm²
Maximum energy density[1]	1 J/cm²

1. At 1064 nm, 7 ns, 10 Hz.

PHYSICAL CHARACTERISTICS

Aperture diameter	55 mm
Absorber	H12
Dimensions	85Ø x 4D mm

Weight	0.039 kg

ORDERING INFORMATIONS

UD55-500-H12	201220

INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at gentec-eo.com/contact-us