

UD19-50-W5

Uncalibrated thermal disk sensor for laser power measurement up to 50 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	50 W
Maximum average power (fan-cooled)	50 W
Noise equivalent power	1 mW
Spectral range	0.19 - 10 μm
Typical rise time ¹	5 s
Typical power sensitivity ²	0.65 mV/W
Recommended load impedance	100 k Ω

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	0.33 mV/J
Maximum measurable energy ¹	200 J
Noise equivalent energy	23 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	100 kW/cm ²
Maximum energy density ¹	1.1 J/cm ²

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

PHYSICAL CHARACTERISTICS

Absorber	W5
Dimensions	44 \varnothing x 3D mm
Weight	0.007 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