

UP52N-50S-QED-D0

Thermal detector for laser power measurement up to 50 W.



PRODUCT FAMILY KEY FEATURES

MODULAR CONCEPT

Increase the power capability of your detector: 4 different cooling modules

HIGH PEAK POWER DIFFUSING ABSORBER

Perfect for pulsed beams with high energy density

COMPACT DESIGN

32 mm thick

HIGH AVERAGE POWER

Measure up to 50 W of continuous power

SMART INTERFACE

Containing all the calibration data

AWARD-WINNING TECHNOLOGY

The UP-QED laser power detectors for extremely high density lasers were recognized among the most innovative photonics technologies for the 2021 Laser Focus World Innovators Awards, as a Gold honoree.



COMPATIBLE STAND

STAND-S-443

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous)	50 W
Maximum average power (1 minute)	50 W
Noise equivalent power ¹	15 mW
Spectral range ²	0.266 - 2.5 μm
Typical rise time ³	4 s
Power calibration uncertainty ⁴	±2.5 %
Repeatability	±0.5 %

- 1. Nominal value, actual value depends on electrical noise in the measurement system.
- 2. For the calibrated spectral range, see the user manual.
- 3. With anticipation.
- 4. Including linearity with power.

MEASUREMENT CAPABILITIES (ENERGY MODE)

Maximum measurable energy ¹	1000 Ј
Noise equivalent energy 2	0.25 J
Minimum repetition period	9 s
Maximum pulse width	371 ms

- 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
- 5 65 .

DAMAGE THRESHOLDS

Energy calibration uncertainty³

Maximum energy density ²	8 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	Convection
Aperture diameter	52 mm
Absorber	QED
Dimensions	89H x 89W x 32D mm
Weight	0.62 kg
ORDERING INFORMATION	
UP52N-50S-QED-D0	203880
UP52N-50S-QED-IDR-D0	205202
UP52N-50S-QED-INT-D0	205195
UP52N-50S-QED-BLU-D0	TBD

Maximum average power density¹

100 kW/cm²

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