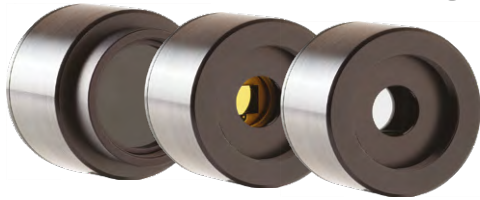


# POWER DETECTORS

Low power measurement

Available with  
  
integra



## PH: PHOTODETECTORS

- Photodetectors for measurements up to 750 mW
- Available from UV to IR
- Silicon, UV-silicon and germanium sensors
- OD.3/OD1/OD2 attenuators available

■ FAST RESPONSE POWER DETECTORS



## PRONTO-SI: ALL-IN-ONE PHOTODETECTOR + METER

- Compact laser power meter up to 800 mW
- 10 x 10 mm aperture
- Integrated OD1 slide-in attenuator
- Color touchscreen display

■ PORTABLE & EASY TO USE



## UM: BROADBAND PYROELECTRIC DETECTORS

Our pyroelectric power detectors have the noise level of a photodetector, but with the large bandwidth of a pyroelectric sensor. They have everything you need to accurately measure extremely low powers from the DUV to the FIR.

- 9 mm Ø aperture
- Broadband, flat spectral response
- Very low noise, down to 5 nW

■ MEASURE LOW POWER AT ANY WAVELENGTH

Available with  
  
integra

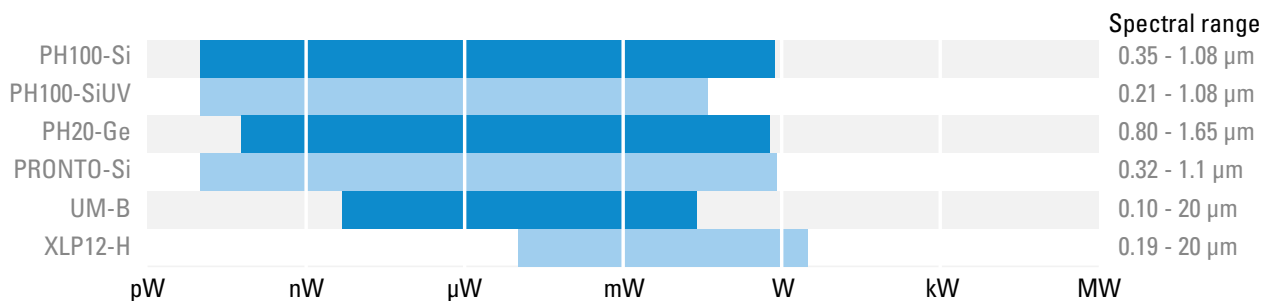


## XLP12: LOW-POWER THERMOPILES

- Low noise level: only  $\pm 0.5 \mu\text{W}$
- IR filter available
- Available with volume absorber for short pulses

■ THERMAL POWER DETECTORS WITH LOW NOISE

## COMPARISON TABLE - LOW POWER MEASUREMENT



# POWER DETECTORS

General use power detectors



## UP-H: BROADBAND THERMAL DETECTORS

Our standard absorber offers high damage thresholds and a flat spectral response, making this series of power detectors a versatile solution that can cover most of your laser power measurement needs.

- Available in 6 sizes:
 

|         |         |
|---------|---------|
| 10 mm Ø | 12 mm Ø |
| 17 mm Ø | 19 mm Ø |
| 25 mm Ø | 55 mm Ø |
- Available with 5 cooling modules:
  - Convection (S)
  - Small heatsink (H)
  - Large heatsink (L)
  - Fan (F)
  - Water (W)



■ THE WIDEST RANGE OF LASER MEASUREMENTS

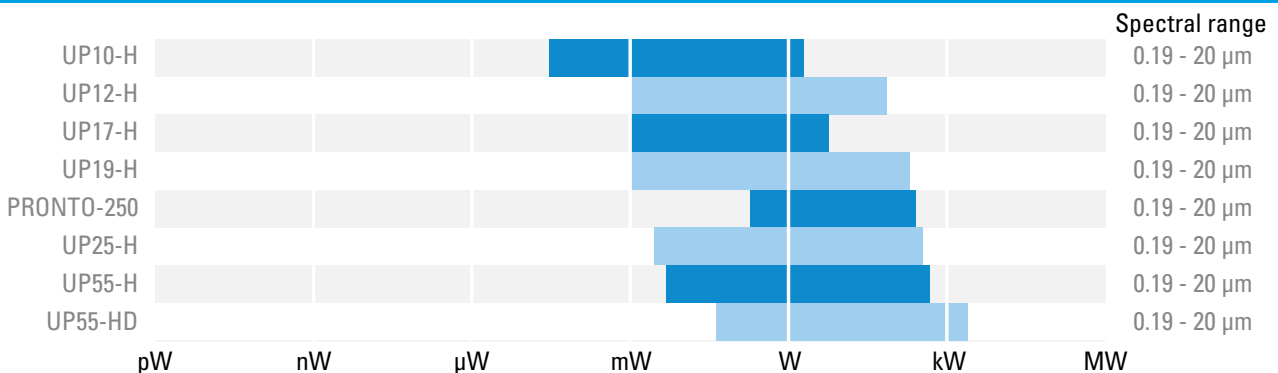
## PRONTO-250-EZ

- Compact laser power meter up to 250 W
- Three measurement modes:
  - Single-Shot Power (SSP): up to 250 W
  - Continuous Power (CWP): up to 8 W
  - Single Shot Energy (SSE): up to 25 J
- The FLEXibility to pick only the calibrations you need:
  - Default calibration "Y": for visible to NIR wavelengths (248 nm to 2.5 µm)
  - Additional calibration "C": for CO<sub>2</sub> lasers (10.6 µm)
  - Additional calibration "E": for energy measurements with ± 5 % accuracy

■ PORTABLE & EASY TO CLEAN



## COMPARISON TABLE - GENERAL USE POWER DETECTORS



# POWER DETECTORS

High performance power detectors

Available with  
*integra*



## UP-W

Our "W" absorber can handle tightly focused beams thanks to its extremely high damage threshold for average power density. It can be used to measure up to 50 W, from the UV to IR.

- Available in 2 sizes: 19 mm or 55 mm Ø aperture
- High damage threshold absorber (100 kW/cm<sup>2</sup>)
- Our highest maximum average power density

■ IDEAL FOR UV LASERS & TIGHTLY FOCUSED BEAMS

Available with  
*integra*



## UP-QED

The UP-QED series are power detectors for lasers with extreme power and energy density, such as laser micromachining systems. Thanks to a proprietary absorber that diffuses the measured beam and absorbs it in a larger volume, these detectors have the highest damage thresholds on the market.

- Available in 2 sizes: 16 mm or 52 mm Ø aperture
- Our highest maximum average power density
- Our highest maximum energy density
- Not suitable for UV lasers

■ THE HIGHEST DAMAGE THRESHOLDS ON THE MARKET!



Available with  
*integra*

## IS: INTEGRATING SPHERE POWER METER

Get the best of both worlds with our new integrating sphere power meters. This technology offers the fast risetime of photodetectors with the high average power of thermal detectors.

- Fast risetime: 0-95% in less than 0.2 seconds
- Measures up to 1000 W of continuous power
- Available in 2 sizes: 12 mm or 50 mm Ø aperture
- Integrated signal processing with USB or RS-232 output

■ FAST AND ROBUST POWER MEASUREMENT

## COMPARISON TABLE - HIGH PERFORMANCE POWER DETECTORS

| Model    | pW | nW | µW         | mW | W          | kW | MW | Spectral range |
|----------|----|----|------------|----|------------|----|----|----------------|
| UP17-W   |    |    |            |    | 0.19 - 10  |    |    | 0.19 - 10 µm   |
| UP19-W   |    |    |            |    | 0.19 - 10  |    |    | 0.19 - 10 µm   |
| UP55-W   |    |    |            |    | 0.19 - 10  |    |    | 0.19 - 10 µm   |
| UP16-QED |    |    |            |    | 0.27 - 2.5 |    |    | 0.27 - 2.5 µm  |
| UP52-QED |    |    |            |    | 0.27 - 2.5 |    |    | 0.27 - 2.5 µm  |
| IS12     |    |    | 0.34 - 1.1 |    |            |    |    | 0.34 - 1.1 µm  |
| IS50     |    |    | 0.34 - 1.1 |    |            |    |    | 0.34 - 1.1 µm  |

# POWER DETECTORS

High power measurement



## HP60: HIGH POWER, LOW BACK-REFLECTIONS

The gold reflector cone of the HP60 series is specifically designed to handle the high intensities of very small beams. By reflecting the incident light on the sides of the aperture, the cone effectively spreads the intensity on a larger area, thus raising the damage threshold to 10 kW/cm<sup>2</sup> at the full power (15 kW).

- FOR SMALL BEAMS UP TO 15 KW



## HP100/125: LARGE APERTURE, COMPACT DEVICE

The HP100A and HP125A are the smallest in our HP series of high-power detectors. They are versatile high-power detectors that measure up to 15 kW of continuous power with a noise level of only a few watts. These models feature a very large aperture of 100 or 125 mm Ø.

- CONTINUOUS POWER MEASUREMENT UP TO 15 KW



## SUPER HP: CUSTOM, HIGH-POWER MEASUREMENT

Our unique high-power design allows for infinite customization capabilities. Do not hesitate to contact us with your specific needs. Our Super HP models feature a USB output for direct measurements on a PC as well as our standard DB15 connector. RS-232 output is also available.

- CUSTOM SOLUTIONS FOR UP TO 150 KW



## PRONTO: PORTABLE HIGH-POWER PROBES

When you are on the go and water cooling is not easily accessible, the PRONTO high-power probes are the best solution. These all-in-one power meters with touchscreen controls come in 4 models: 500 W, 3 kW, 6 kW and 10 kW. Their integrated display is encased in a rugged metallic casing to withstand the harshest of environments.

- UP TO 10 KW WITHOUT WATER COOLING

## COMPARISON TABLE - HIGH POWER MEASUREMENT

