

# PRESENTATION

## OVERVIEW OF THE DIFFERENT MODELS

Our optical detectors are offered for both power or energy measurements. Measure as low as a few femtojoules in energy or a few picowatts in power. Our optical detectors are also offered in standalone formats, where the electronics are integrated in the device, or as standard sensors that you hook up to a meter.

## FOR POWER MEASUREMENTS

The section below lists all the optical detectors used for power measurements. The corresponding comparison table and power range chart are given at page 108.



See pages 110 and 112

### PH-I-USB / PH-I-BNC

- Optical Detectors with Integrated Digital (USB) or Analog (BNC) Modules (no need for a monitor)
- Power Range from pW to  $\mu$ W
- USB: Powered by your PC  
LabView Software included
- BNC: Battery or AC Powered (for use with an oscilloscope)  
Noise Level down in the fW

*pW*

### INTEGRATED USB OR BNC MODULES



See page 114

### PH-B

- 3, 5 and 10 mm  $\emptyset$  Apertures
- Silicon, Germanium or InGaAs Sensors
- To be used with the DPM Digital Module  
DPM is digital, powered by USB and includes powerful LabView Software
- Power Range from pW to  $\mu$ W

### FOR USE WITH DPM

### NOISE DOWN TO THE pW LEVEL



See page 116

### PH

- High Power Optical Detectors for measurements up to 750 mW
- Available from UV to IR
- Silicon, UV-Silicon or Germanium Sensors
- OD1/OD2 Attenuators Available

### HIGH POWER Si OR Ge SENSORS

# PRESENTATION

## FOR ENERGY MEASUREMENTS

The section below lists all the optical detectors used for energy measurements. The corresponding comparison table and energy range chart are given at page 107.



See pages 116 and 118

### PE-I-USB / PE-I-BNC

- Optical Detectors with Integrated Digital (USB) or Analog (BNC) Modules (no need for a monitor)
- Energy Range from pJ to  $\mu$ J
- USB: Powered by your PC  
LabView Software included
- BNC: Battery or AC Powered  
Noise Level down in the fJ

### INTEGRATED USB OR BNC MODULES



See page 120

### PE-B

- 3, 5 and 10 mm  $\emptyset$  Apertures
- To be used with the DPM or APM Digital or Analog Modules  
DPM is digital, powered by USB and includes powerful LabView Software  
APM is Analog and includes battery and AC power
- Available with Silicon, Germanium or InGaAs Sensors
- Lowest Noise Level of ALL Energy Detectors (2 fJ with PE3B-Si)

### FOR USE WITH DPM OR APM 2 fJ NOISE LEVEL



See pages 122 and 124

### TRAP

- Optical TRAP Detectors in 2 formats:  
Integrated USB Module  
Standard Head with Separate Preamplifier
- High Quantum efficiency (QE)  $\gg 99\%$
- Spatial Uniformity Better than 0.02%
- Low Calibration Uncertainty  $< 0.5\%$  from 400 to 980 nm
- For Low Divergence or Collimated Beams
- Heads Optimized for both CW or Pulsed Lasers
- Use these TRAP Detectors As Golden Calibration Standards

### OPTICAL TRAP DETECTORS QUANTUM EFFICIENCY $\gg 99\%$ SPATIAL UNIFORMITY $< 0.02\%$ TO BE USED AS GOLDEN CALIBRATION STANDARDS