

PRESENTATION

OVERVIEW OF THE DIFFERENT MODELS

The power detectors in this section measure from a few nW to 500 W. For powers higher than 500 W, see the High Power Solutions section on page 94.

MONITORS

ENERGY DETECTORS

POWER DETECTORS

HIGH POWER SOLUTIONS

PHOTO DETECTORS

THZ DETECTORS

OEM DETECTORS

SPECIAL PRODUCTS

BEAM DIAGNOSTICS

Available with
 *integra*



XLP12

- Low Power Thermopile
Sensitivity of 200 mV/W
Noise Level of $\pm 0.5 \mu\text{W}$
- Minimal Thermal Drift of $6 \mu\text{W}/^\circ\text{C}$
- IR Filter Available
- Available with volume absorber for short pulses

■ LOW POWER THERMOPILE 1 μW NOISE LEVEL

See page 70

Available with  *blu* Available with  *integra*



UP-H

- Standard (Broadband) Coating
- Available in 5 sizes:

10 mm \emptyset	12 mm \emptyset
25 mm \emptyset	19 mm \emptyset
55 mm \emptyset	
- Available with 5 Cooling Modules:
 - Convection (S, H or L)
 - Fan (F)
 - Water (W)

■ STANDARD COATING
■ 5 SIZES
■ 5 COOLING MODULES
■ UP TO 500 W

See pages 74 to 80

Available with  *blu* Available with  *integra*



UP-W

- High Damage Threshold Coating (100 kW/cm²)
- 17 or 50 mm \emptyset Aperture
- Perfect for:
UV lasers, very fast lasers and small beams

■ HIGH AVG OR PEAK POWER DENSITIES

See page 82 to 86

PRESENTATION

NEW
Available with
blu

Available with
integra



UP-VR

- High Peak Power Volume Absorbers
- 18 or 55 mm Ø Aperture

- SPECIFICALLY DESIGNED FOR HIGH ENERGY
- SOLID STATE LASERS
- HIGH AVG OR PEAK POWER DENSITIES

See pages 88 to 90

PRONTO-250

- Compact Power Probe up to 250 W
- 19 mm Ø Aperture
- Also available with 3 measurement modes (Pronto-250-PLUS)
- YAG and CO₂ Calibrations

- POCKET-SIZED
- EASY-TO-USE
- COLOR TOUCH SCREEN DISPLAY
- FROM LOW TO HIGH POWERS (1 TO 250 W)
- ADVANCED FEATURES LIKE DATA LOGGING AND DATA TRANSFER TO PC

See page 92



UM-B

- Small Compact Detector
- 9 mm Ø Aperture
- Very Low Noise Level, down to 5 nW using a pyroelectric sensor *

- ULTRA-LOW POWER PYROELECTRIC
- 5 nW NOISE LEVEL

* Chopper needed for CW lasers.

See page 94



COMPARISON TABLE



Available with INTEGRA all-in-one detector + meter



Available with BLU

MODEL	PMAX ^	PMAX (1 MIN)	NOISE LEVEL	EMAX	λMIN	λMAX	ABSORBER TYPE	APERTURE	SEE PAGE
UM9B-BL-L-D0	200 μW	200 μW	5 nW	N/A	100 nm	20 μm	Radiometer	9 mm Ø	94
UM9B-BL-D0	25 mW	25 mW	300 nW	N/A	100 nm	20 μm	Radiometer	9 mm Ø	94
UP10P/K-2S-H5-L	2 W	2 W	100 μW	3 J	190 nm	20 μm	Broadband	10 mm Ø	72
UPF10P/K-2S-H5-L	2 W	2 W	100 μW	3 J	280 nm	2.1 μm	Broadband	10 mm Ø	72
XLP12-3S-H2	3 W	3 W	0.5 μW	5 J	190 nm	20 μm	Broadband	12 mm Ø	70
XLPF12-3S-H2	3 W	3 W	0.5 μW	5 J	280 nm	2.1 μm	Broadband	12 mm Ø	70
XLP12-3S-VP	3 W	3 W	0.5 μW	---	250 nm	20 μm	Volume Abs.	12 mm Ø	70
UP17P-6S-H5	6 W	7 W	1 mW	15 J	190 nm	20 μm	Broadband	17 mm Ø	82
UP17P-6S-W5	6 W	7 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	82
UP12E-10S-H5	10 W	20 W	1 mW	5 J	190 nm	20 μm	Broadband	12 mm Ø	74
UP19K-15S-H5	15 W	30 W	1 mW	15 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP19K-15S-W5	15 W	30 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	76
UP19K-15S-VR	15 W	20 W	2 mW	40 J	266 nm	2.5 μm	Volume Abs.	18 mm Ø	88
UP12E-20H-H5	20 W	40 W	1 mW	5 J	190 nm	20 μm	Broadband	12 mm Ø	74
UP19K-30H-H5	30 W	60 W	1 mW	15 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP19K-30H-W5	30 W	60 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	84
UP19K-30H-VR	30 W	35 W	2 mW	40 J	266 nm	2.5 μm	Volume Abs.	18 mm Ø	88
UP25N-40S-H9	40 W	80 W	3 mW	40 J	190 nm	20 μm	Broadband	25 mm Ø	78
UP55N-40S-H9	40 W	80 W	5 mW	200 J	190 nm	20 μm	Broadband	55 mm Ø	80
UP50N-40S-W9	40 W	80 W	5 mW	500 J	190 nm	10 μm	High Threshold	50 mm Ø	86
UP19K-50L-H5	50 W	90 W	1 mW	15 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP19K-50L-W5	50 W	85 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	84
UP19K-50F-W5	50 W	85 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	84
UP19K-50W-W5	50 W	85 W	1 mW	200 J	190 nm	10 μm	High Threshold	17 mm Ø	84
UP50N-50H-W9	50 W	85 W	5 mW	500 J	190 nm	10 μm	High Threshold	50 mm Ø	86
UP50N-50F-W9	50 W	85 W	5 mW	500 J	190 nm	10 μm	High Threshold	50 mm Ø	86
UP50M-50W-W9	50 W	85 W	5 mW	500 J	190 nm	10 μm	High Threshold	50 mm Ø	86
UP55N-50S-VR	50 W	50 W	15 mW	500 J	266 nm	2.5 μm	Volume Abs.	55 mm Ø	90
UP12E-70W-H5	70 W	110 W	1 mW	5 J	190 nm	20 μm	Broadband	12 mm Ø	74
UP25N-100H-H9	100 W	200 W	3 mW	40 J	190 nm	20 μm	Broadband	25 mm Ø	78
UP55N-100H-H9	100 W	200 W	5 mW	200 J	190 nm	20 μm	Broadband	55 mm Ø	80
UP55N-100H-VR	100 W	100 W	15 mW	500 J	266 nm	2.5 μm	Volume Abs.	55 mm Ø	90
UP19K-110F-H9	110 W	150 W	3 mW	25 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP19K-150W-H5	150 W	190 W	1 mW	15 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP55N-150F-VR	150 W	150 W	15 mW	500 J	266 nm	2.5 μm	Volume Abs.	55 mm Ø	90
UP19K-200W-H9	200 W	200 W	3 mW	25 J	190 nm	20 μm	Broadband	19 mm Ø	76
UP55M-200W-VR	200 W	200 W	15 mW	500 J	266 nm	2.5 μm	Volume Abs.	55 mm Ø	90
PRONTO-250	250 W	N/A	10 mW	---	190 nm	20 μm	Broadband	19 mm Ø	92
UP25N-250F-H12	250 W	300 W	10 mW	40 J	190 nm	20 μm	Broadband	25 mm Ø	78
UP55N-300F-H12	300 W	300 W	15 mW	200 J	190 nm	20 μm	Broadband	55 mm Ø	80
UP25M-350W-H12	350 W	350 W	10 mW	40 J	190 nm	20 μm	Broadband	25 mm Ø	78
UP55M-500W-H12	500 W	500 W	15 mW	200 J	190 nm	20 μm	Broadband	55 mm Ø	80

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COMPARISON TABLE

POWER RANGES

You can use the graph below to compare the power ranges of our pyroelectric and thermopile power detectors. Ranges go from the noise level to the maximum power reading.

Table 1.
Comparison of the power ranges of the pyroelectric and thermopile power detectors



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