

REVISED
5:24 pm, 1/24/08

Laser Lab Instruments

PDA Series Amplified Photodetectors

- Detectors
- Power Meters
- CCD Cameras
- Optical Chopper
- Beam Profilers & Extensions Sets
- Spectrometers
- Temperature Controller & Shutter
- Filter Wheels

POWER SUPPLY INCLUDED



PDA36A
Base Assembly
Sold Separately

The PDA series of amplified photodiodes utilizes a thin profile to allow access to light paths where there is minimal space. All connections and controls are located perpendicular to the light path, making them easy to access. In addition, the PDA series includes a low-noise transimpedance or voltage amplifier capable of driving 50Ω loads. Additionally, the housing features a removable threaded coupler that is compatible with many of Thorlabs' SM1 and SM05 threaded accessories, allowing convenient mounting of external optics, fibers, and apertures. This also provides an easy mounting mechanism to Thorlabs' cage assembly and lens tube accessories. Each housing provides two #8-32 tapped mounting holes (M4 for-EC versions) centered on the detector surface. A 120VAC AC/DC power supply is included (230VAC for-EC versions).

Thorlabs' line of Switchable and Fixed Gain Detectors provides gain adjustment over a 70dB range to take full advantage of the photodiode response range. Gains are adjustable from 1.5kV/A to 4.7MV/A in eight 10dB steps. Our selection of wideband detectors increase the bandwidth range of DC to -150MHz, while still maintaining low noise. The large-area detectors operate with the same switchable gain as described above but use large area photodiodes.

All Meters Come Complete With Power Supply

PDA Series General Specifications

MODEL ¹	SENSOR	BANDWIDTH ²	SPECTRAL RANGE	ACTIVE AREA	GAIN
PDA25K	GaP	7.5MHz	150-550nm	6.25mm ² (2.5 x 2.5mm)	1.5 x 10 ³ to 4.75 x 10 ⁶ V/A ⁴
PDA10A	Si	150MHz	200-1100nm	0.8mm ² (Ø1mm)	1 x 10 ⁴ V/A
PDA36A	Si	17MHz	350-1100nm	13mm ² (3.6 x 3.6mm)	1.5 x 10 ³ to 4.75 x 10 ⁶ V/A ⁴
PDA100A	Si	1.5MHz	400-1100nm	100mm ² (10 x 10mm)	1.5 x 10 ³ to 4.75 x 10 ⁶ V/A ⁴
PDA10CF	InGaAs	150MHz	700-1800nm	0.2mm ² (0.5mm)	1 x 10 ⁴ V/A
PDA10CS	InGaAs	17MHz	700-1800nm	0.8mm ² (Ø1mm)	1.5 x 10 ³ to 4.75 x 10 ⁶ V/A ⁴
PDA50B	Ge	400kHz	800-1800nm	19.6mm ² (Ø5.0mm)	1.5 x 10 ³ to 4.75 x 10 ⁶ V/A ⁴
PDA10D	InGaAs	15MHz	1200-2600nm	0.8mm ² (Ø1mm)	1 x 10 ⁴ V/A
PDA30G	PbS	0.2kHz to 1kHz ³	1000-2900nm	9mm ² (3.0 x 3.0mm)	100V/A
PDA20H	PbSe	0.2kHz to 10kHz ³	1500-4800nm	4mm ² (2.0 x 2.0mm)	100V/A

1) Same specs apply to the-EC versions
 2) Applies to lowest gain setting on switchable gain versions
 3) AC coupled output only
 4) Switchable Gain, 8 steps, 70dB total adjustment
 5) Gain response with no resistance

For detailed specification on individual models, including responsivity curves and noise data, please visit our website at www.thorlabs.com.

ITEM#	\$	£	€	RMB	DESCRIPTION
PDA25K	\$ 369.00	£ 232.50	€ 343,20	¥ 3,524.00	150-550 nm Switchable Gain, GaP Detector, 120 VAC Power Supply
PDA25K-EC	\$ 399.00	£ 251.40	€ 371,10	¥ 3,810.50	150-550 nm Switchable Gain, GaP Detector, 230VAC Power Supply
PDA10A	\$ 278.00	£ 175.10	€ 258,50	¥ 2,654.90	200-1100 nm Fixed Gain, Si Detector, 120 VAC Power Supply
PDA10A-EC	\$ 278.00	£ 175.10	€ 258,50	¥ 2,654.90	200-1100 nm Fixed Gain, Si Detector, 230VAC Power Supply
PDA36A	\$ 299.00	£ 188.40	€ 278,10	¥ 2,855.50	350-1100 nm Switchable Gain, Si Detector, 120 VAC Power Supply
PDA36A-EC	\$ 329.00	£ 207.30	€ 306,00	¥ 3,142.00	350-1100 nm Switchable Gain, Si Detector, 230VAC Power Supply
PDA100A	\$ 305.00	£ 192.20	€ 283,70	¥ 2,912.80	400-1100 nm Switchable Gain, Si Detector, 120 VAC Power Supply
PDA100A-EC	\$ 335.00	£ 211.10	€ 311,60	¥ 3,199.30	400-1100 nm Switchable Gain, Si Detector, 230VAC Power Supply
PDA10CF	\$ 369.00	£ 232.50	€ 343,20	¥ 3,524.00	700-1800 nm Fixed Gain, InGaAs Detector, 120 VAC Power Supply
PDA10CF-EC	\$ 369.00	£ 232.50	€ 343,20	¥ 3,524.00	700-1800 nm Fixed Gain, InGaAs Detector, 230VAC Power Supply
PDA10CS	\$ 369.00	£ 232.50	€ 343,20	¥ 3,524.00	700-1800 nm Switchable Gain, InGaAs Detector, 120 VAC Power Supply
PDA10CS-EC	\$ 399.00	£ 251.40	€ 371,10	¥ 3,810.50	700-1800 nm Switchable Gain, InGaAs Detector, 230VAC Power Supply
PDA50B	\$ 469.00	£ 295.50	€ 436,20	¥ 4,479.00	800-1800 nm Switchable Gain, Ge Detector, 120 VAC Power Supply
PDA50B-EC	\$ 499.00	£ 314.40	€ 464,10	¥ 4,765.50	800-1800 nm Switchable Gain, Ge Detector, 230VAC Power Supply
PDA10D	\$ 460.00	£ 289.80	€ 427,80	¥ 4,393.00	1.2-2.6 μm Fixed Gain, InGaAs Detector, 120 VAC Power Supply
PDA10D-EC	\$ 460.00	£ 289.80	€ 427,80	¥ 4,393.00	1.2-2.6 μm Fixed Gain, InGaAs Detector, 230VAC Power Supply
PDA30G	\$ 364.00	£ 229.30	€ 338,50	¥ 3,476.20	1.0-2.9 μm Fixed Gain, PbS Detector, 120 VAC Power Supply
PDA30G-EC	\$ 364.00	£ 229.30	€ 338,50	¥ 3,476.20	1.0-2.9 μm Fixed Gain, PbS Detector, 230VAC Power Supply
PDA20H	\$ 398.00	£ 250.70	€ 370,10	¥ 3,800.90	1.5-4.8 μm Fixed Gain, PbSe Detector, 120 VAC Power Supply
PDA20H-EC	\$ 398.00	£ 250.70	€ 370,10	¥ 3,800.90	1.5-4.8 μm Fixed Gain, PbSe Detector, 230VAC Power Supply

Fiber Adapters

The SM1 Series fiber adapter thread directly onto PDA Series detectors for convenient attachment of fiber optics. They can also be used with the SM1 series stackable lens tubes.



SM1FC

ITEM#	\$	£	€	RMB	DESCRIPTION
SM1FC	\$ 26.00	£ 16.40	€ 24,20	¥ 248.30	FC Adapter
T4119	\$ 35.00	£ 22.10	€ 32,60	¥ 334.30	50Ω In-Line Terminator

NEW! OEM CABLES

PDA-C-72

OEM Cables
Now Available for Use
With Our PDA
Series Detectors. See Page 893

