



Detectors

Power Meters

CCD Camera

Spectrometer

Optical Chopper

Beam Profiler & Fabry-Perot

Digital Delay Generator

Temperature Controller

Filter Wheel & Shutter

Laser Lab Instruments

Amplified Photodetectors - PDA Series



PDA36A
Base assembly sold separately.
Power Supply Included.

The new PDA series detector housing utilizes a thin profile to allow access to light paths with the minimum amount of interference. All connections and controls are located perpendicular to the light path providing increased accessibility.

Each PDA includes a low noise transimpedance or voltage amplifier and provides a 50Ω drive capability. The wideband models have a fixed gain and 150MHz bandwidth, while the switchable gain versions provide 70dB of adjustment.

New for the PDA line is the addition of IR detectors with the ability to detect light out to 4.8μm. These photoconductive sensors include an AC coupled amplifier with a fixed voltage gain of 100V/V (50V/V with 50Ω load).

The new PDA series housing includes a removable threaded coupler that is compatible with any number of Thorlabs SM1 and SM05 threaded accessories. This allows convenient mounting of external optics, light filters, and apertures, as well as providing an easy mounting mechanism when using Thorlabs' cage assembly 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).

All Meters Come Complete with Power Supply

PDA Series General Specifications

MODEL ¹	SENSOR	BANDWIDTH ²	SPECTRAL RANGE	ACTIVE AREA	GAIN
PDA25K	GaP	2.5MHz	150-550nm	6.25mm ² (2.5 x 2.5mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA10A	Si PIN	150MHz	200-1100nm	0.8mm ² (Ø1mm)	1 x 10 ⁴ V/A
PDA36A	Si PIN	10MHz	400-1100nm	13mm ² (3.6 x 3.6mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA100A	Si PIN	250kHz	400-1100nm	100mm ² (10 x 10mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA10CF	InGaAs	150MHz	800-1800nm	0.2mm ² (0.5mm)	1 x 10 ⁴ V/A
PDA10CS	InGaAs	10MHz	800-1800nm	0.8mm ² (Ø1mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA50B	Ge	250kHz	800-1800nm	19.6mm ² (Ø5.0mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA10D	InGaAs	10MHz	1200-2600nm	0.8mm ² (Ø1mm)	1.5 x 10 ⁴ to 4.75 x 10 ⁶ V/A ⁴
PDA30G	PbS	0.2kHz to 1kHz ³	1200-2900nm	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

For Detailed Specifications on Individual Models including Responsivity Curves & Noise Data Please Visit our Website at www.thorlabs.com

ITEM#	\$	£	€	¥	DESCRIPTION
PDA25K	\$ 369.00	£ 276.75	€ 387,45	¥ 62,730	150 - 550nm Switchable Gain, GaP Detector, 110VAC Power Supply
PDA25K-EC	\$ 399.00	£ 299.25	€ 418,95	¥ 67,830	150 - 550nm Switchable Gain, GaP Detector, 230VAC Power Supply
PDA10A	\$ 278.00	£ 208.50	€ 291,90	¥ 47,260	200 - 1100nm Fixed Gain, Si Detector, 110VAC Power Supply
PDA10A-EC	\$ 278.00	£ 208.50	€ 291,90	¥ 47,260	200 - 1100nm Fixed Gain, Si Detector, 230VAC Power Supply
PDA36A	\$ 299.00	£ 224.25	€ 313,95	¥ 50,830	400 - 1100nm Switchable Gain, Si Detector, 110VAC Power Supply
PDA36A-EC	\$ 329.00	£ 246.75	€ 345,45	¥ 55,930	400 - 1100nm Switchable Gain, Si Detector, 230VAC Power Supply
PDA100A	\$ 305.00	£ 228.75	€ 320,25	¥ 51,850	400 - 1100nm Switchable Gain, Si Detector, 110VAC Power Supply
PDA100A-EC	\$ 335.00	£ 251.25	€ 351,75	¥ 56,950	400 - 1100nm Switchable Gain, Si Detector, 230VAC Power Supply
PDA10CF	\$ 369.00	£ 276.75	€ 387,45	¥ 62,730	800 - 1800nm Fixed Gain, InGaAs Detector, 110VAC Power Supply
PDA10CF-EC	\$ 369.00	£ 276.75	€ 387,45	¥ 62,730	800 - 1800nm Fixed Gain, InGaAs Detector, 230VAC Power Supply
PDA10CS	\$ 369.00	£ 276.75	€ 387,45	¥ 62,730	800 - 1800nm Switchable Gain, InGaAs Detector, 110VAC Power Supply
PDA10CS-EC	\$ 399.00	£ 299.25	€ 418,95	¥ 67,830	800 - 1800nm Switchable Gain, InGaAs Detector, 230VAC Power Supply
PDA50B	\$ 469.00	£ 351.75	€ 492,45	¥ 79,730	800 - 1800nm Switchable Gain, Ge Detector, 110VAC Power Supply
PDA50B-EC	\$ 499.00	£ 374.25	€ 523,95	¥ 84,830	800 - 1800nm Switchable Gain, Ge Detector, 230VAC Power Supply
PDA10D	\$ 460.00	£ 345.00	€ 483,00	¥ 78,200	1.2 - 2.6μm Switchable Gain, InGaAs Detector, 110VAC Power Supply
PDA10D-EC	\$ 460.00	£ 345.00	€ 483,00	¥ 78,200	1.2 - 2.6μm Switchable Gain, InGaAs Detector, 230VAC Power Supply
PDA30G	\$ 364.00	£ 273.00	€ 382,20	¥ 61,880	1.2 - 2.9μm Fixed Gain, PbS Detector, 110VAC Power Supply
PDA30G-EC	\$ 364.00	£ 273.00	€ 382,20	¥ 61,880	1.2 - 2.9μm Fixed Gain, PbS Detector, 230VAC Power Supply
PDA20H	\$ 398.00	£ 298.50	€ 417,90	¥ 67,660	1.5 - 4.8μm Fixed Gain, PbSe Detector, 110VAC Power Supply
PDA20H-EC	\$ 398.00	£ 298.50	€ 417,90	¥ 67,660	1.5 - 4.8μm 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.

ITEM#	\$	£	€	¥	DESCRIPTION
SM1FC	\$ 26.00	£ 19.50	€ 27,30	¥ 4,420	FC Adapter
T4119	\$ 34.00	£ 25.50	€ 35,70	¥ 5,780	In-Line Terminator

50Ω Terminator

Ideal termination for PDA-Series detectors to achieve maximum bandwidth.



T4119