

# UV Photodetector

## Si-PDA-Adj-G Photodetector

### Silicon-based amplifying photodetector

- Wide spectral coverage and strong silicon-based compatibility
- Enlarged design with outstanding low-light detection capability
- Adjustable gain + bandwidth adaptation for wide scene compatibility
- High compatibility + standardization for easy integration



One Platform Many Possibilities

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## Overview

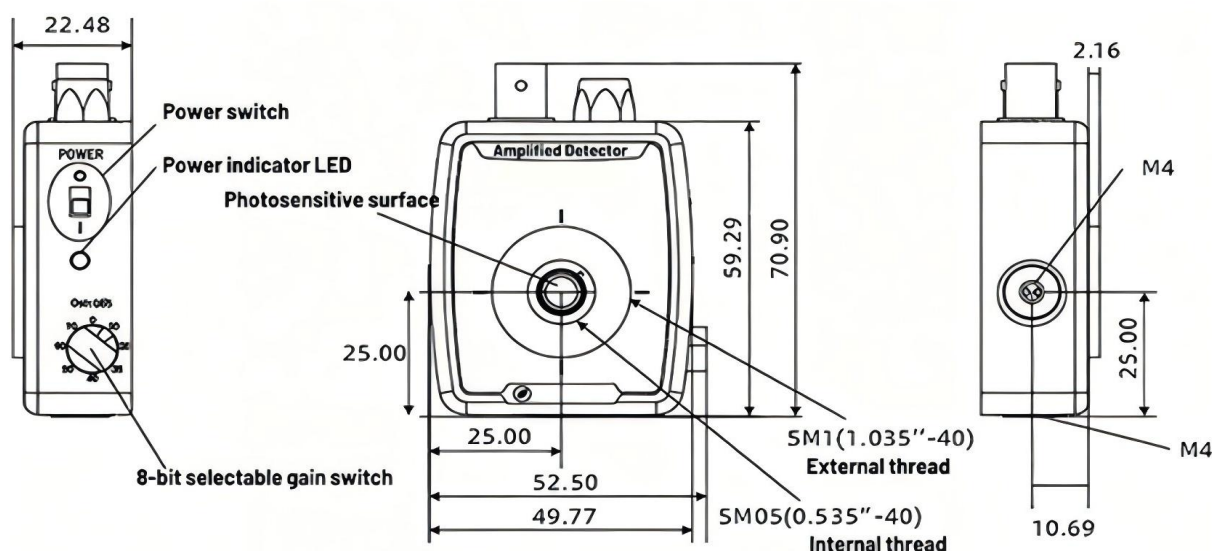
### Introduction:

This product uses a silicon detector with a photosensitive range covering 190nm to 1100nm, and is often used for ultraviolet and visible light measurement. As an amplifying detector, it has 8 adjustable gain levels, enabling quantitative photoelectric conversion. It not only has a wide dynamic range, suitable for various photoelectric development scenarios with extensive applications, but also is the same model as Thorlabs' product, allowing seamless compatibility. Additionally, it features excellent performance and high cost-effectiveness, can provide comprehensive technical support, and can meet the needs of non-standard customization services.

### Features:

- It adopts a silicon detector with a photosensitive range of 190nm~1100nm, suitable for ultraviolet and visible light measurement.
- It is an amplifying detector with 8 adjustable gain levels, enabling quantitative photoelectric conversion.
- It has a wide dynamic range and is suitable for various photoelectric development scenarios.
- It is seamlessly compatible with the same type of products from THORLABS.
- It features excellent performance and high cost-effectiveness, and provides comprehensive technical support.
- Non-standard customization services are supported.

### Dimension:



## Specifications

### Si/InGaAs-ps-S Series Specifications Sheet

Parameter Item	Parameter Value
Gain Range (Hi-Z Load)	1.51kV/A~4.75MV/A
Gain Range (50 Load)	0.75kV/A~2.38MV/A
Signal Amplitude	Hi-Z Load: 0~10V; 50 Load: 0~5V
Operating Temperature	10~40
Storage Temperature	-20~70
Detector Net Weight	0.10kg
Overall Dimension	2.79" X 2.07" X 0.89" (70.9 mm X 52.5 mm X 22.5 mm)

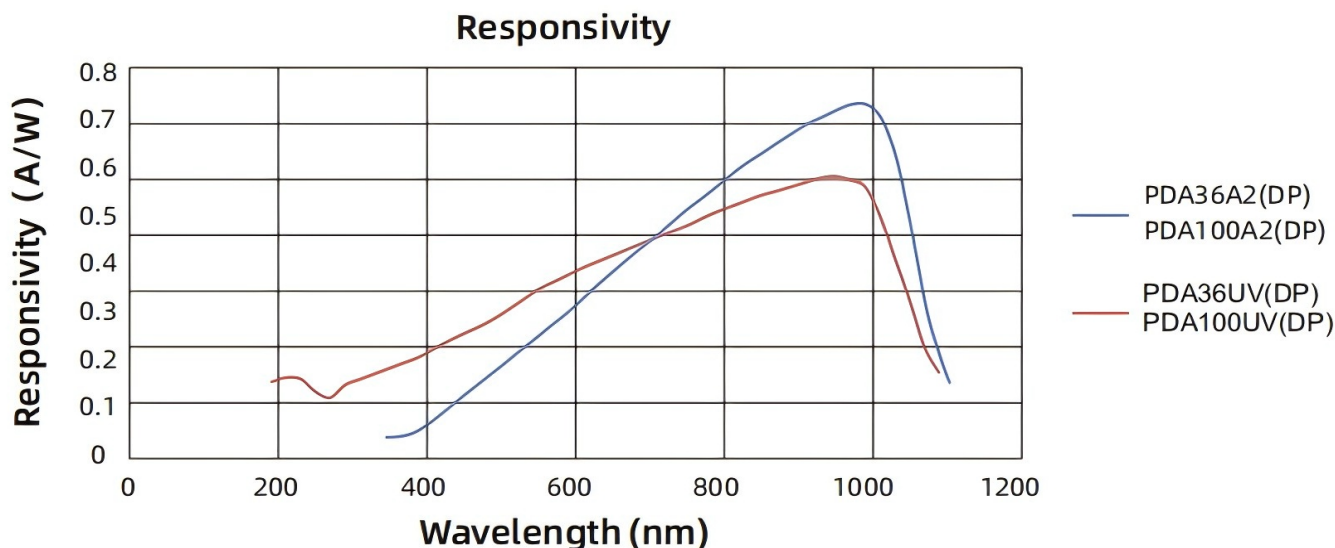
## Adjustable Gain Parameters

### Detailed Adjustable Gain Specifications Sheet

	0dB	10dB	20dB	30dB
Gain (Hi-Z)	$1.51 \times 10^3$ V/A	$4.75 \times 10^3$ V/A	$1.5 \times 10^4$ V/A	$4.75 \times 10^4$ V/A
Gain (50 )	$0.75 \times 10^3$ V/A	$2.38 \times 10^3$ V/A	$0.75 \times 10^4$ V/A	$2.38 \times 10^4$ V/A
Bandwidth (BW)	12MHz	1.6MHz	1MHz	260kHz
Noise (RMS)	258 $\mu$ V	192 $\mu$ V	207 $\mu$ V	211 $\mu$ V
Gain (Hi-Z)	$1.51 \times 10^5$ V/A	$4.75 \times 10^5$ V/A	$1.5 \times 10^5$ V/A	$4.75 \times 10^6$ V/A
Gain (50 )	$0.75 \times 10^5$ V/A	$2.38 \times 10^5$ V/A	$0.75 \times 10^6$ V/A	$2.38 \times 10^6$ V/A
Bandwidth (BW)	90kHz	28kHz	9kHz	3kHz
Noise (RMS)	214 $\mu$ V	234 $\mu$ V	277 $\mu$ V	388 $\mu$ V
Signal Offset			$\pm 8$ mV(Typ.) , $\pm 12$ mV(Max)	

## Responsivity

### Responsivity Diagram of the Si/InGaAs-ps-S Series



## Service & Support

We are dedicated to delivering exceptional optoelectronic solutions to every client. From precision manufacturing and secure delivery to full-lifecycle technical support, we are here to ensure a seamless and reliable experience at every step.

### 1. Warranty Policy

#### Quality First, Worry-Free Operation

**Warranty Period:** We offer a **two-year** warranty service for all of our core optoelectronic products, effective from the date of shipment.

**Coverage:** We provide free repair or replacement services for malfunctions caused by material defects or workmanship errors under normal operating conditions.

**Rapid Response:** Upon receiving a warranty claim, we guarantee to initiate the assessment process within **24 hours** to minimize your equipment downtime.

### 2. Technical Support

#### Expert Team, Full-Process Guidance

**Technical Consultation:** Our team of senior optical engineers provides **24/7 online support** to assist with installation, commissioning, optical path alignment, and parameter optimization.

**Scheduled Maintenance:** We offer full-lifecycle maintenance recommendations, including firmware upgrades, optical component cleaning guidelines, and precision calibration services.

**Training Services:** We provide customized remote or on-site operational and safety training to ensure your team can operate the equipment efficiently and safely.

### 3. Logistics & Delivery

#### Precision Packaging, Global Reach

**Professional Packaging:** Given the fragile nature of optical instruments, we utilize industrial-grade shockproof, anti-static, and moisture-proof vacuum packaging to ensure zero damage during transit.

**Logistics Partners:** We partner with top-tier global logistics providers (**DHL / FedEx / UPS / SF Express**) to offer reliable shipping with real-time tracking.

**Shipping Insurance:** All shipments are fully insured to eliminate logistics risks.

### 4. Compliance & Certification


#### Strict Standards, Total Compliance

**Quality Certification:** Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE** and **RoHS**.

**Export Compliance:** "Committed to environmental responsibility, all our products comply with **RoHS 2.0** and **REACH** standards, ensuring safety and global compliance."

### Explore Series

Model	Photosensitive Range	Photosensitive Size	Characteristics	Response Time Constant	Characteristics
PDA36A2(DP)	350~1100nm	3.6mm×3.6mm	-	10ns	Wide application, balanced parameters
PDA36UV(DP)	190~1100nm	3.6mm×3.6mm	-	0.5μs	UV-enhanced type
PDA100A2(DP)	320~1100nm	φ9.8mm	-	35ns	Large target detector
PDA100UV(DP)	190~1100nm	φ9.8mm	UV-enhanced type	3μs	-

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

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