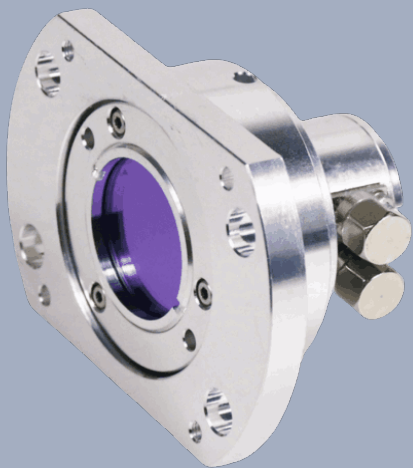


UV Photodetector

Si-30keV-AG X-Ray Detector

Si-based dedicated radiation measurement device.

- Multi-ray compatibility
- High detection performance
- Vacuum environment adaptation
- Stable and durable



One Platform Many Possibilities

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Get a Quote



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Overview

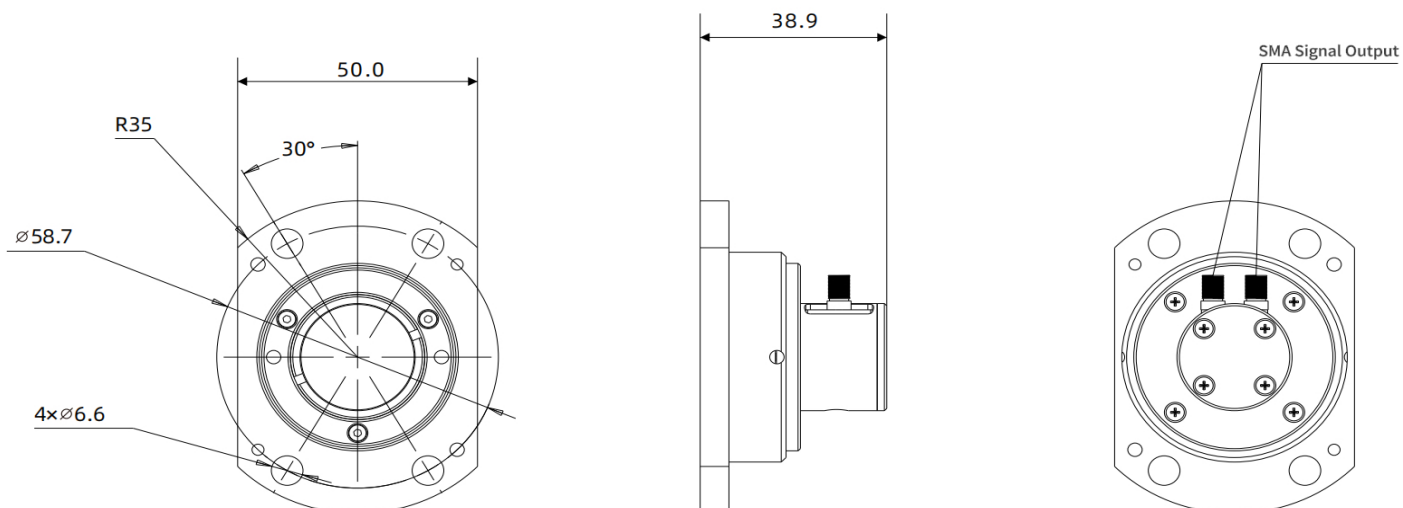
Introduction:

This product supports direct X-ray detection and can also detect various rays such as gamma rays, beta rays, and charged particles. It has the advantages of high quantum efficiency and high energy resolution. It integrates pre-amplification electronics, enabling adjustable gain. It adopts a vacuum flange structure, which can be applied to vacuum scenarios. It not only has excellent performance and high cost performance, but also can provide comprehensive technical support and non-standard customization services.

Features:

- Supports direct X-ray detection, and can also detect gamma rays, beta rays, charged particles, and other rays.
- Features high quantum efficiency and high energy resolution.
- Integrates pre-amplifier electronics with adjustable gain.
- Adopts a vacuum flange structure, suitable for vacuum scenarios.
- Excellent performance, high cost-effectiveness, and provides comprehensive technical support.
- Can be customized non-standard.

Dimension:



Specifications

Same parameter table

Parameter Category	Common Parameter Values
Energy Range	0~30keV
Gain Range	Hi-Z Load: 1.51kV/A~4.75MV/A; 50 Load: 0.75kV/A~2.38MV/A
Signal Amplitude	Hi-Z Load: 0~10V; 50 Load: 0~5V
Gain Adjustment	Rotary gear adjustment (0~70dB, 10dB per step, 8 steps total), bandwidth inversely proportional to gain
Operating Temperature	-20~60
Storage Temperature	-20~80
Signal Interface	SMA Cable
Core Technology	Direct X-ray detection (compatible with gamma, beta, charged particles); High quantum efficiency; Vacuum flange structure ($\leq 10^{-4}$ Pa)
Additional Features	Integrated pre-amplifier electronics; Customizable non-standard services

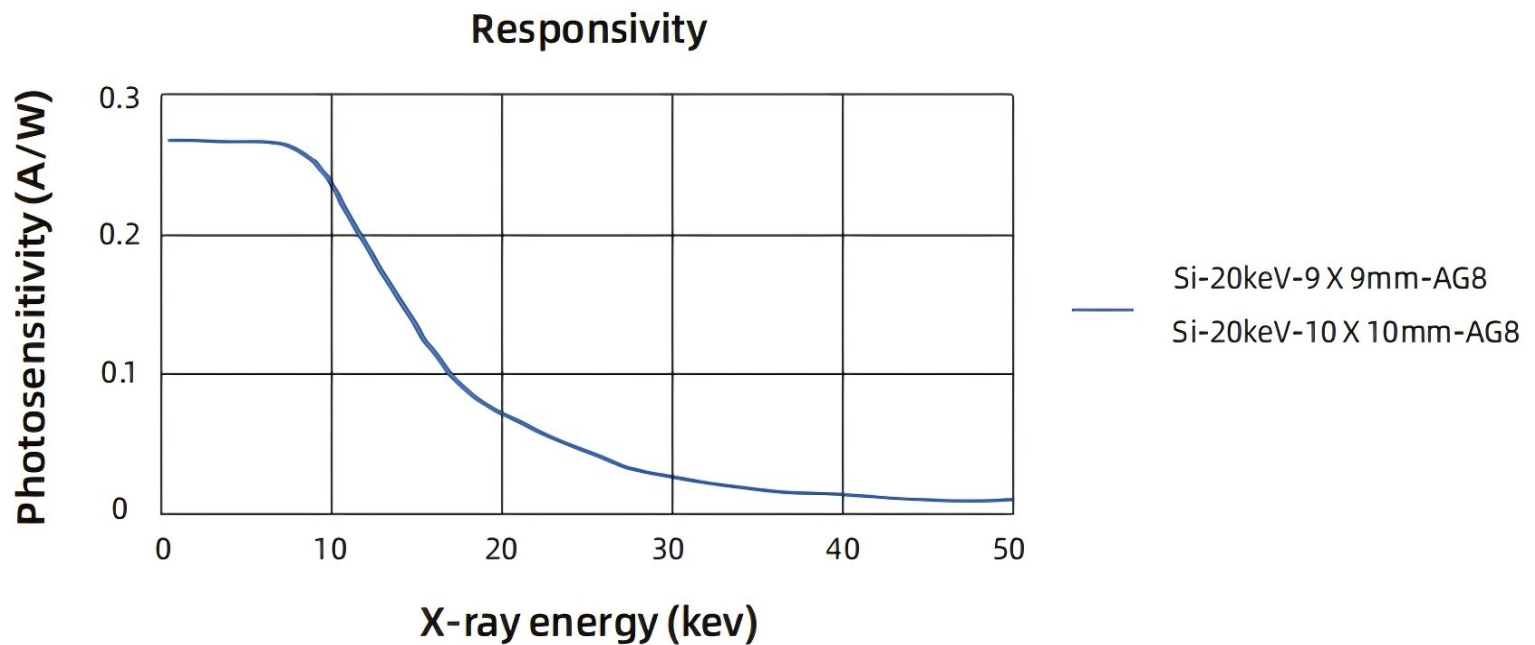
Adjustable Gain Parameters

Detailed Adjustable Gain Specifications Sheet

	0dB	10dB	20dB	30dB
Gain (Hi-Z)	1.51×10^3 V/A	4.75×10^3 V/A	1.5×10^4 V/A	4.75×10^4 V/A
Gain (50)	0.75×10^3 V/A	2.38×10^3 V/A	0.75×10^4 V/A	2.38×10^4 V/A
Bandwidth (BW)	12MHz	1.6MHz	1MHz	260kHz
Noise (RMS)	258 μ V	192 μ V	207 μ V	211 μ V
	40dB	50dB	60dB	70dB
Gain (Hi-Z)	1.51×10^5 V/A	4.75×10^5 V/A	1.5×10^5 V/A	4.75×10^6 V/A
Gain (50)	0.75×10^5 V/A	2.38×10^5 V/A	0.75×10^6 V/A	2.38×10^6 V/A
Bandwidth (BW)	90kHz	28kHz	9kHz	3kHz
Noise (RMS)	214 μ V	234 μ V	277 μ V	388 μ V
Signal Offset			± 8 mV(Typ.) , ± 12 mV(Max)	

Responsivity

Responsivity Diagram



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 Size	Response Cut - off Frequency	Overall Dimension	Junction Capacitance (Typical)
Si-30keV-9 X 9mm-AG8	9mm×9mm	20MHz	50mm×38.9mm×70mm	25pF at VR=100V, f=10kHz
Si-30keV-10 X 10mm-AG8	10mm×10mm	40MHz	50mm X 38.9mm X 70mm	40pF at VR=70V, f=10kHz

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

Let us help you move science forward—faster and smarter.

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