

UV Photodetector

GaN-AG Photodetector

Optoelectronic devices based on wide bandgap semiconductors

- Full ultraviolet band coverage
- Flexible and adjustable gain
- High reliability and environmental adaptability
- Complete customization and supporting facilities



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+658099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com

Overview

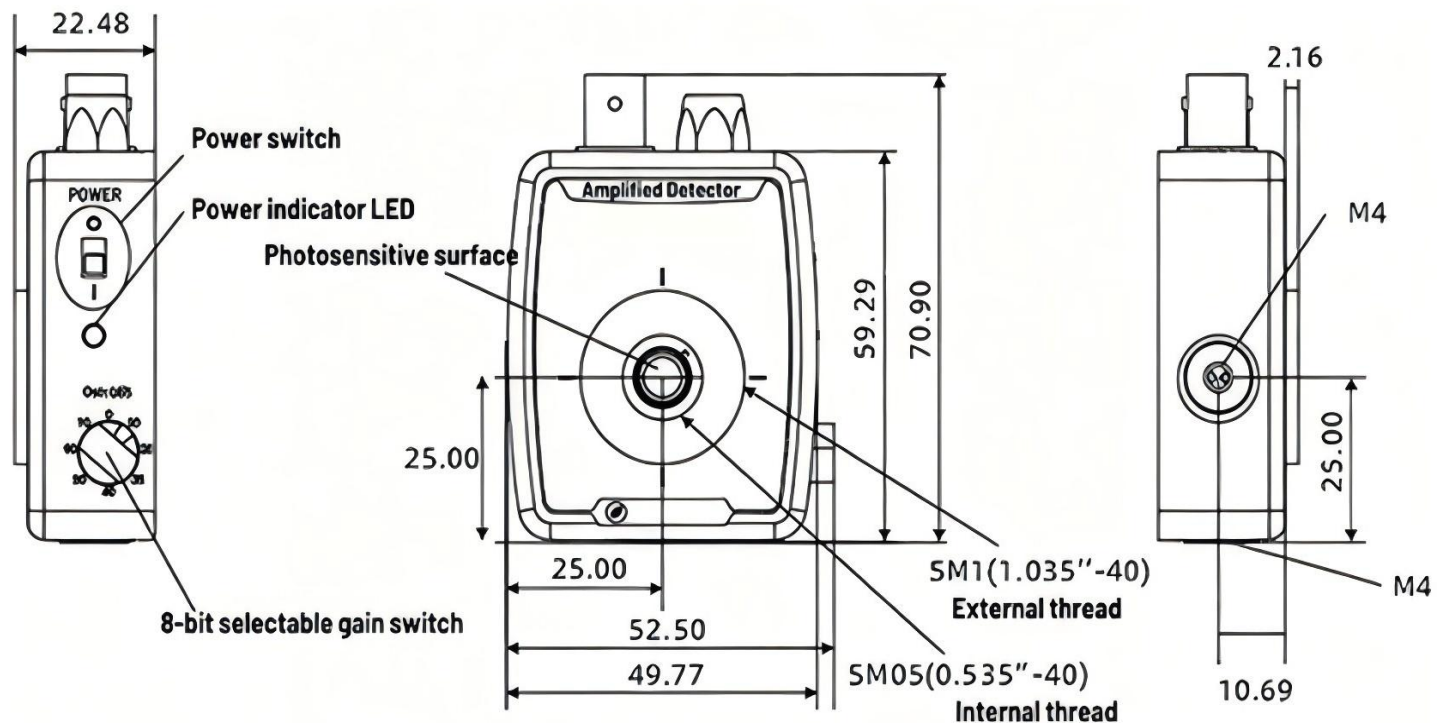
Introduction:

This GaN-based photodetector has a photosensitive range covering 210nm to 440nm, making it suitable for ultraviolet light measurement, and features high responsivity at a wavelength of 355nm. It adopts a vacuum flange structure, compatible with a high vacuum environment of $\leq 10^{-4}$ Pa. As an amplifying detector, it supports 8 adjustable gain levels, enabling quantitative photoelectric conversion in scenarios with different light intensities. Additionally, it offers advantages such as high stability, long service life, and high cost performance, and also provides comprehensive technical support and non-standard customization services.

Features:

- Light-sensitive range: 210nm~440nm (high response at 355nm)
- Compatible with vacuum flanges for high vacuum up to $\leq 10^{-4}$ Pa
- 8 adjustable gain levels for quantitative measurement of different light intensities
- Moreover, it features high stability, long service life and high cost performance
- Technical support and non-standard customization are also available

Dimension:



Specifications

GaN-AG Series Specifications Sheet

Core Parameter Name	Parameter Value
Operating Temperature	-25 ~ 85
Storage Temperature	-40 ~ 85
Dimension	50mm × 38.6mm × 70mm
Signal Interface	SMA Cable
Gain Adjustment Range	0~70dB (8-level adjustable)
Device Weight	0.10kg
Detectivity & Noise Characteristic	Gain links with bandwidth/noise, suitable for different light intensity measurement

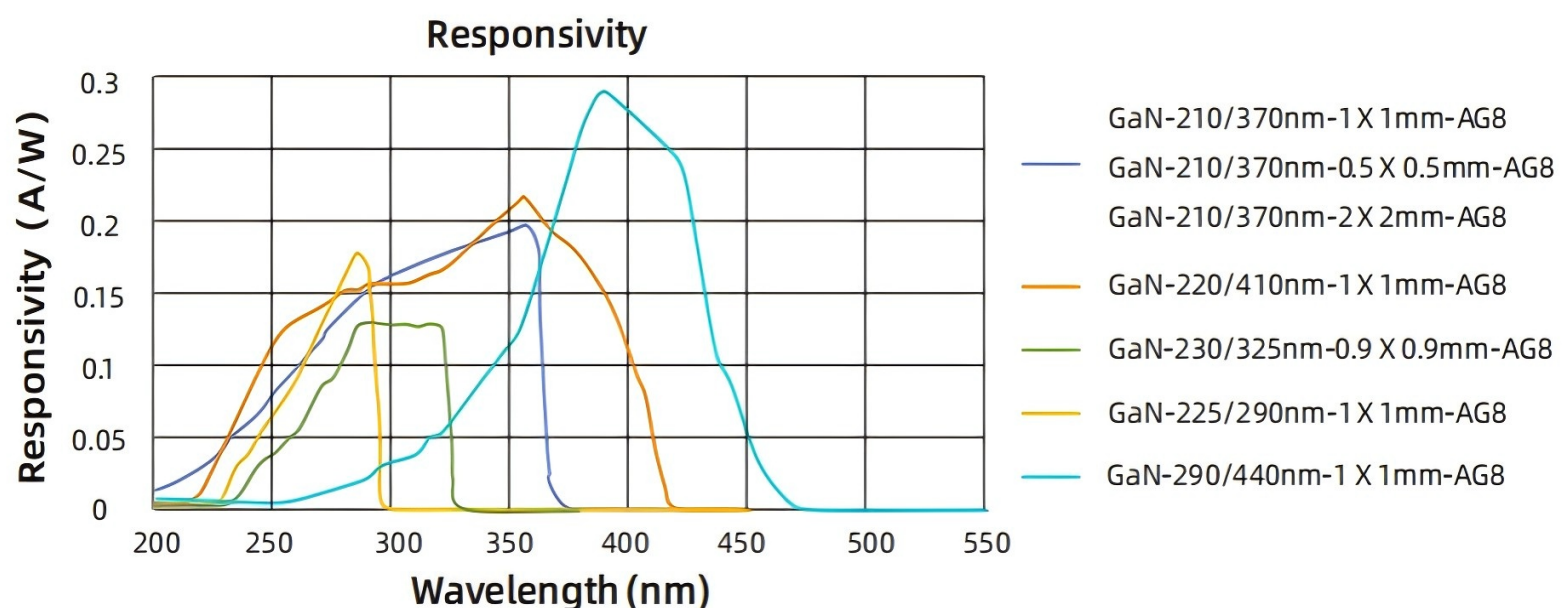
Adjustable Gain Parameters

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 Ω)	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 Ω)	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 of the GaN-AG 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 (nm)	Photosensitive Size (mm)	Gain Range (Hi-Z, V/A)	Photosensitive Range (nm)	Bandwidth (at 0dB, kHz)
GaN-210/370nm-1 X 1mm-AG8	210~370	φ1	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000
GaN-210/370nm-0.5 X 0.5mm-AG8	-	<0.22	$1.51 \times 10^3 \sim 4.75 \times 10^6$	210~370	12000
GaN-210/370nm-2 X 2mm-AG8	210~370	φ4	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000
GaN-220/410nm-1 X 1mm-AG8	220~410	φ1	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000
GaN-230/325nm-0.9 X 0.9mm-AG8	230~325	<0.77	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000
GaN-225/290nm-1 X 1mm-AG8	225~290	φ1	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000
GaN-290/440nm-1 X 1mm-AG8	290~440	φ1	$1.51 \times 10^3 \sim 4.75 \times 10^6$	-	12000

 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.

[Get a Quote](#)



Get Expert Advice
+658099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com