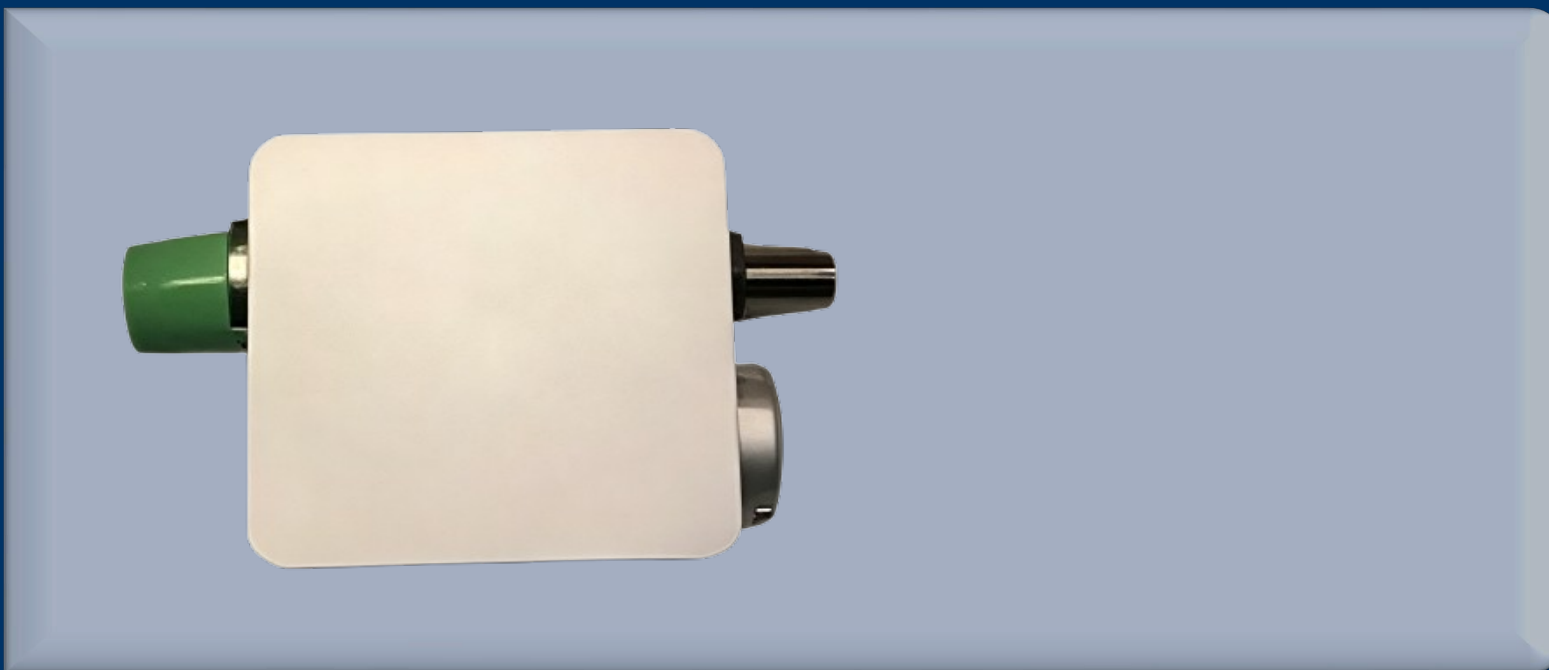


InGaAs Photodetector

High-Speed Photodetector 5G

5GHz Broadband Low-Noise InGaAs Detector

- 5GHz bandwidth, 60ps rising edge.
- 800-1700nm NIR response.
- Built-in RF matching & bias circuits.
- Tolerates 100mW pulsed optical power.
- Standard FC/PC & SMA interfaces.



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+658099 5547 (WhatsApp)



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www.venuslabtech.com

Overview

Rapid response, precise capture

A highly integrated 5GHz low-noise InGaAs detection module. It can accurately convert weak, high-speed transient optical signals into high-quality radio frequency electrical signals, and is an ideal core component for high-frequency photoelectric detection.

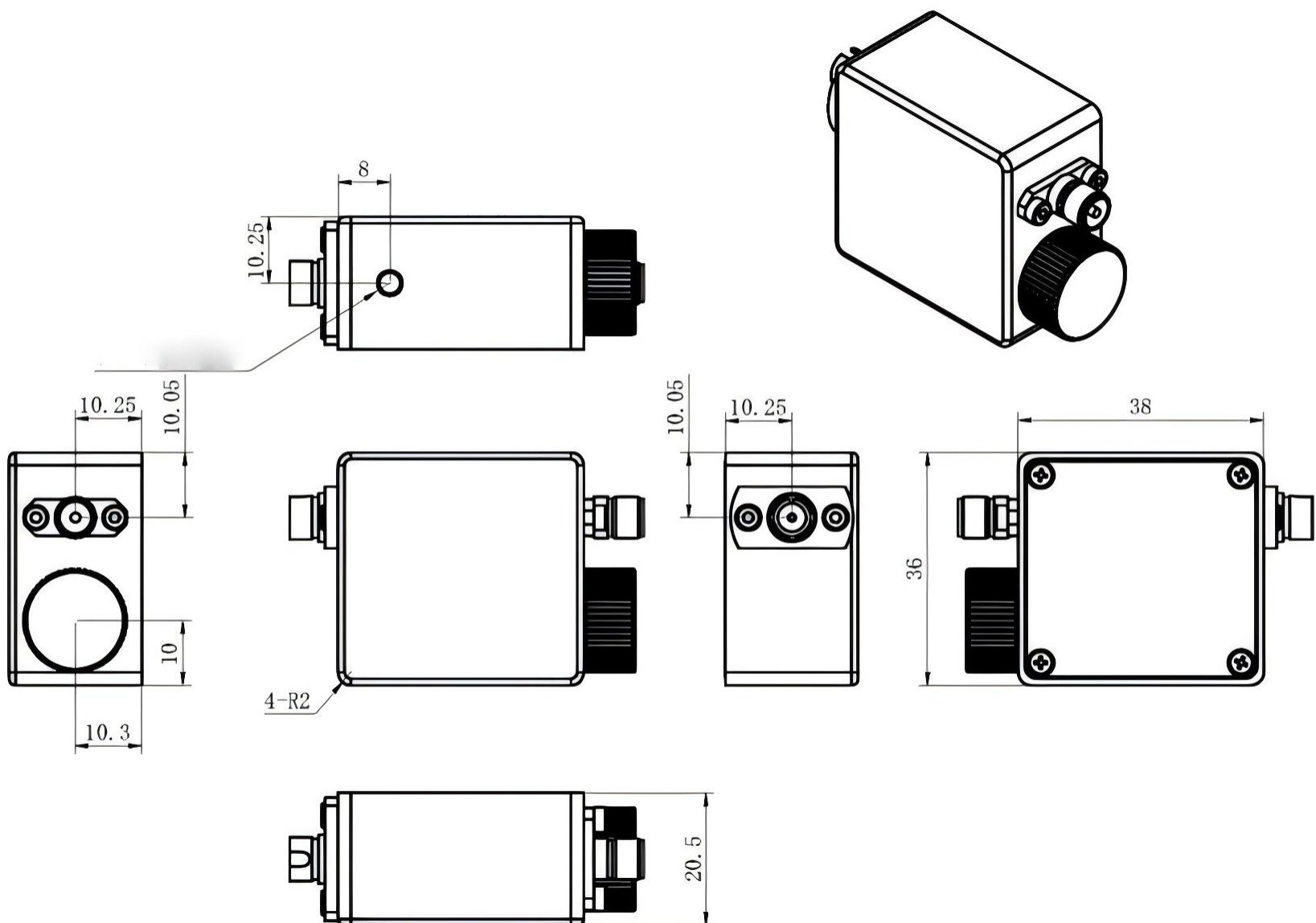
Features

High bandwidth: 5GHz Rise time: typ 60ps
Response range: 800~1700nm Low output noise

Applications

- Laser waveform detection: Time-domain waveform analysis of nanosecond ultra-short pulse lasers.
- Fiber optic sensing: Real-time monitoring and demodulation of signals in high-speed sensing networks.
- Laser vibration measurement: High-fidelity photoelectric conversion of high-frequency micro-vibration signals.
- High-speed optical detection: Rapid capture of various broadband near-infrared transient optical signals.

Dimension:



Absolute Maximum Ratings

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Operating Temperature	TC	-40 ~ +85	°C
Storage Temperature	TSTG	-55 ~ +100	°C
Saturation Input Pulsed Optical Power	Pin	100	mW
Module Operating Voltage	VCC	10	V

Specifications

Optoelectronic Performance (T=25°C)

Characteristic Parameter	Symbol	Typical Value	Unit
Spectral Response Range		800 ~ 1700	nm
-3dB Bandwidth	BW	DC - 5.5	GHz
Detector Responsivity	Rv	0.95	A/W
Saturation Input Pulsed Optical Power	Pin	100	mW
Dark Current @ 10V Bias	Idark	10	pA
Rise Time	Tr	60	ps
Output Impedance	Ro	50	
Optical Input	-	FC / PC	-
Signal Output	-	SMA	-
Coupling Method	-	DC	-

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	Rise Time	-3dB Bandwidth	Saturation Input Optical Power	Spectral Response Range
VL-PD-5G	60 ps	DC - 5.5 GHz	100 mW	800 ~ 1700 nm

 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](#)



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