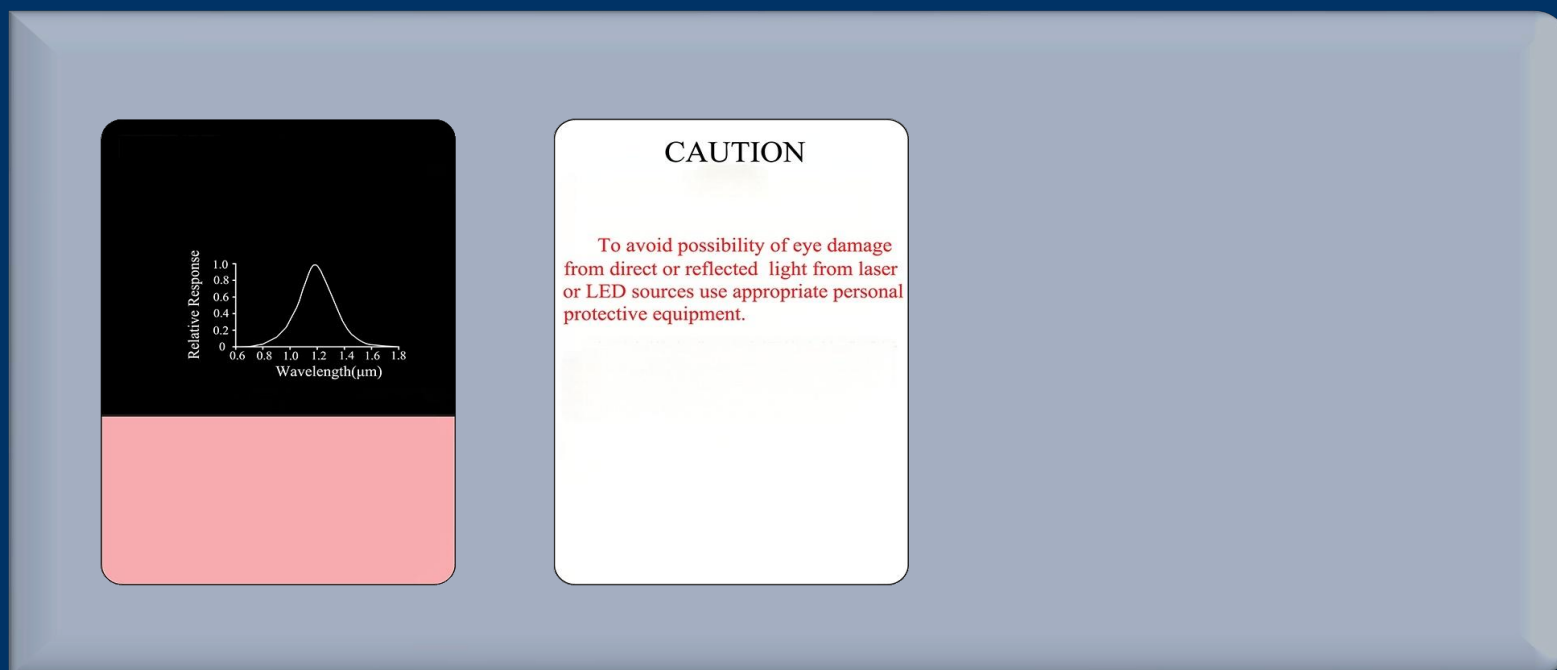


Detection Card

VIS/NIR Detection Card

The "Light Trap" for Nanowatt-Level Signals

- Nanowatt-Level Sensitivity
- Photostorage "Rechargeable" Technology
- Dual-Band Coverage
- Durable Credit-Card Format



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+658099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com

Overview

The Nanowatt Signal Hunter: Capturing the Faintest Beams

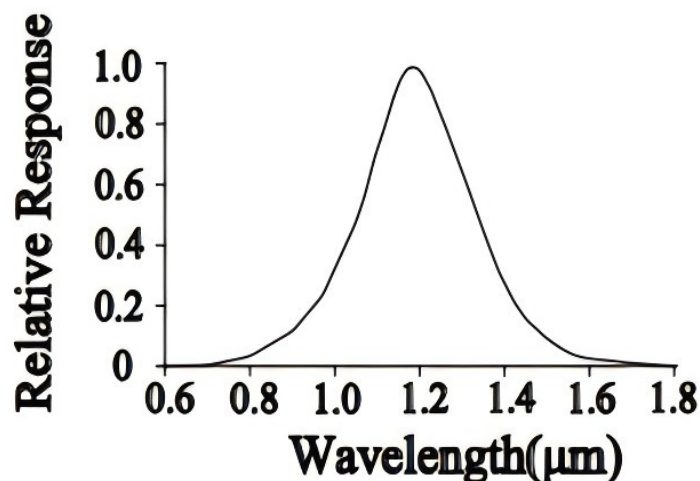
The VL-IR-5070R is a specialized optical tool engineered for **ultra-low signal detection**. Breaking the sensitivity limits of traditional cards, it responds to both **400-640nm** visible light and **800-1700nm** Near-Infrared (NIR) beams.

Unlike standard real-time fluorescence cards, this model utilizes advanced **electron-trapping phosphor materials**. It requires "charging" with visible light (e.g., room light) before use to activate its detection state. When struck by IR beams, the stored energy is released as a bright orange-red glow (~580-750nm). This mechanism allows it to detect faint spots as weak as **175 nW/cm²**, making it the ultimate tool for telecom device testing, stray light analysis, and precision optical alignment.

Usage Note

Note: This card is designed for low-power beams. The damage threshold is approx. **35 mW/cm²**(pulsed). Do not use with high-power lasers to avoid burning the active layer.

Spectral Response Curve



Specifications

Visible / Near-Infrared Detection Card Specifications

Technical Parameter	Specification Data
Model Name	VL-IR-5070R
Absorption Wavelength Range	400 - 640 nm & 800 - 1700 nm
Emission Wavelength Range	~580 to 750 nm (Orange-Red Glow)
Minimum Sensitivity (Continuous Wave)	<ul style="list-style-type: none"> < 2 μW/cm² @ 808 nm < 175 nW/cm² @ 960 nm < 100 μW/cm² @ 1550 nm
Minimum Sensitivity(Pulsed Stimulation)	250 kW/cm ² @ 1064 nm (7ns Pulses, 10 Hz)
Damage Threshold	35 mW/cm ² @ 1064 nm (Single 7ns Pulse)
Active Area Dimensions	53.3 mm x 30.5 mm
Overall Dimensions	53.3 mm x 86.4 mm (Standard Credit Card Size)
Working Principle	Electron-Trapping Phosphor (Requires visible light charging)
Operation Requirement	Constant beam movement required to maintain emission intensity

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	Absorption Wavelength Range	Emission Wavelength Range
VL-IR-5070R	400 - 640 nm & 800 - 1700 nm	~580 to 750 nm (Orange-Red Glow)

 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