

# Detection Card

## Infrared Detection Card

Making the Invisible, Visible

- Wide Spectrum Response
- High Sensitivity & Contrast
- Safety Diffuse Reflection
- Versatile Substrates



One Platform Many Possibilities

Contact Us [sales@venuslabtech.com](mailto:sales@venuslabtech.com)

Get a Quote



Get Expert Advice  
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## Overview

### Instant Visualization: Making Invisible Beams "Seen"

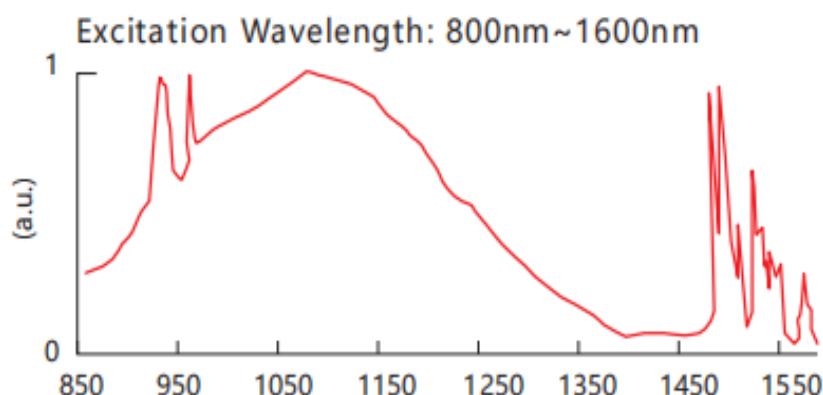
The VenusLab Infrared Detection Card is the essential "Beam Guide" for every optical engineer and laser operator. In Infrared (IR) and Near-Infrared (NIR) applications, the invisibility of the beam often makes alignment and module debugging difficult and hazardous.

Our detection cards utilize high-sensitivity photon-conversion materials that instantly absorb invisible IR radiation and convert it into a bright, clear visible spot (typically green or orange). Requiring no electronics or power, it allows you to easily locate beam positions and profile shapes with just a simple pass.

### Typical Applications

- Laser path alignment
- Fiber coupling testing
- Beam mode analysis
- IR remote/sensor testing

### Spectral Response Curve



## Selection Chart

### Infrared Detection Card Specifications

Technical Parameter	Specification Data
Model Reference	VL-IRC-TR-1600
Detection Wavelength Range	800 - 1600 nm
Typical Target Wavelengths	950 nm, 980 nm, 1064 nm, 1500 nm
Peak Emission (Visual Color)	<ul style="list-style-type: none"> <li>• Green (545nm) @ 950 ~ 980 nm</li> <li>• Red (670nm) @ 1500 ~ 1600 nm</li> <li>• Red (650nm) @ other wavelengths</li> </ul>
Minimum Sensitivity (at 1550nm)	<ul style="list-style-type: none"> <li>• Bright Room: Approx. 3800 <math>\mu\text{W}/\text{cm}^2</math></li> <li>• Dark Room: Approx. 67 <math>\mu\text{W}/\text{cm}^2</math></li> </ul>
Active Area Dimensions	<ul style="list-style-type: none"> <li>• Transmissive Zone: 42 mm x 54 mm</li> <li>• Reflective Zone: 42 mm x 54 mm</li> </ul>
Substrate Material	PVC ISO Integrated Base
Surface Finish	Rough / Matte Texture

## 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	Detection Wavelength Range	Typical Target Wavelengths
VL-IRC-TR-1600	800 - 1600 nm	950 nm, 980 nm, 1064 nm, 1500 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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