VENUSLAB
OPTOELECTRONICS

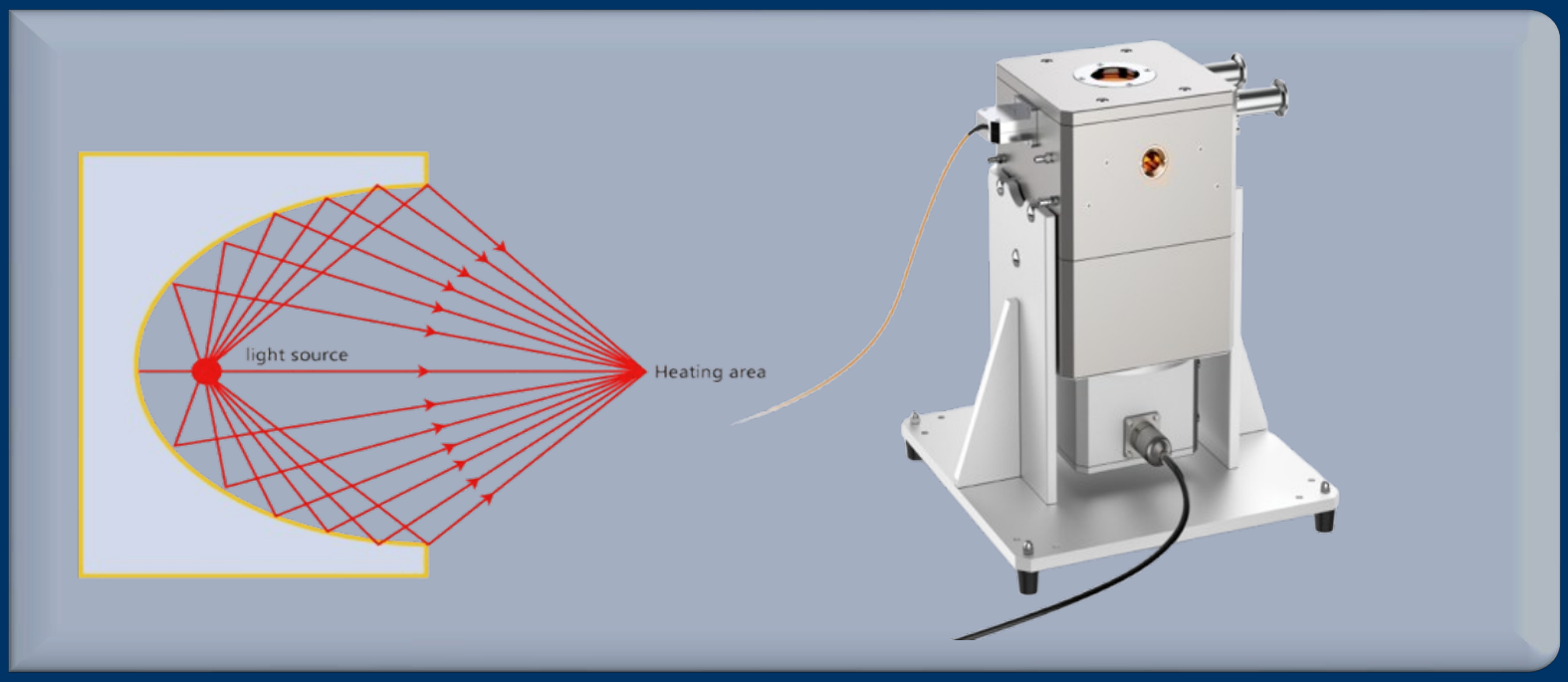
Precision
Meets
Simplicity

# Optical

## Infrared Heating Furnace

### Equipment that uses infrared radiation for heating

- Fast heating speed
- Precise temperature control
- Energy-saving and environmentally friendly
- Flexible heating methods




## One Platform Many Possibilities

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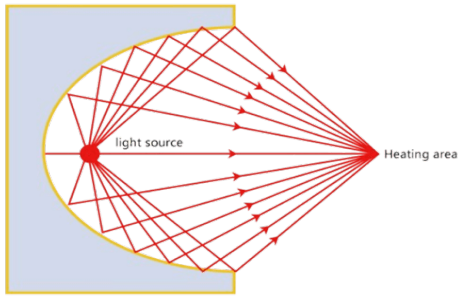
# Infrared Heating Furnace




## Overview

### Introduction to Infrared Heating Furnace：

It is mainly composed of an infrared radiator, a reflector, a control system, etc. It uses an infrared heating tube as the heating element and adopts infrared mirror reflection technology to concentrate and focus infrared radiation energy on the surface of the workpiece, making it heat up quickly. The temperature of this furnace can reach 1700℃, the long-term operating temperature is 1600℃, and the commonly used temperature is 1500℃. The temperature rise rate in the range is greater than 280℃/s, the voltage and power are 220 (380) V and 6-36kw, the heating ranges include point, line (columnar), and surface heating, the cooling method of the reflecting surface is water cooling, the temperature control accuracy is ±1℃, and the temperature display accuracy is 0.1℃.

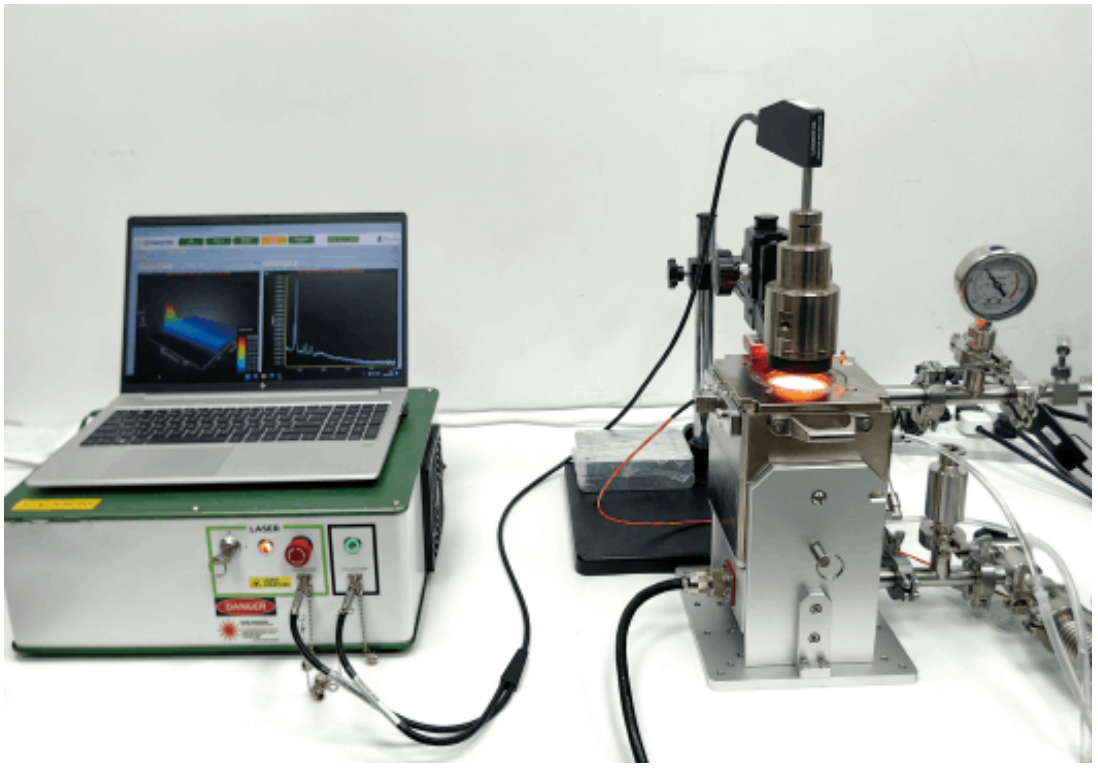
## Specifications

| Parameter Nameontent | Content |
|---|---|
| Heating and Cooling Method | Infrared Heating |
| Temperature Range | RT - 1700°C |
| Temperature Stability | ±0.1°C |
| Temperature Control Rate | Maximum heating rate 30°C/s, natural cooling |
| Sample Stage | Platinum; Φ10mm |
| Optical Path | Reflection/Transmission |
| Viewport Size | Φ7mm |
| Viewport Material | JGS - 2 quartz glass (transmission wavelength range 220 - 2500nm), manually detachable and replaceable |
| Distance from the Upper Surface of the Viewport to the Upper Surface of the Sample Stage (h) | 17mm |
| Chamber | Vacuum/Atmosphere |
| Overall Dimensions | 140mm×160mm×265mm |
| Net Weight | 12.5kg |

# Infrared Heating Furnace

## Application

- **Rapid Thermal Processing (RTP):** Ideal for quenching, annealing, and thermal shock testing due to its fast heating rate (up to 30°C/s).
- **In-Situ Optical Analysis:** Optimized for real-time microscopic observation and spectroscopic analysis via reflection or transmission modes.
- **High-Temperature Material Research:** Suitable for studying phase transitions, melting, and sintering of materials up to 1700°C under vacuum or controlled atmospheres.



## Serivce & 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 | Net Weight | Overall Dimensions | Viewport Size | Sample Stage | Optical Path | Temperature Range |
|---|---|---|---|---|---|---|
| VLO-RT-1700 | 12.5kg | 140mm×160mm×265mm | Φ7mm | Platinum; Φ10mm | Reflection/ Transmission | RT - 1700°C |

📩 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 moves cience forward—faster and smarter.