Rapid Annealing Infrared Guide Heating System GV2

Introducing infrared radiation from a heat source on the atmosphere side into a vacuum chamber to irradiate samples. Ultra High Temperature and Clean Heating!



[Standard Configuration]

- 1. Infrared guide main unit (GVL298)
- 2. Spherical vacuum chamber (TW10)
- 3. Temperature controller (TP300FF)
- 4. High-vacuum exhaust device and Vacuum gauge
- 5. Safety circuit and Installation frame

[Features]

- 1. Ultra high-speed heating of only the sample without the surrounding area.
- 2. Non-contact and clean heating. No contamination.
- 3. Heating in vacuum
- 4. Low power and high temperature attainment (energy-saving heating)

[Major Specifications]

Max. attainable temperature: 1500°C

Max. heating rate: 150°C/sec.

Heating method: Program control

Infrared emission part: 20 mm dia.

25 mm vertical movement

Vol.

18

Attainable vacuum degree: 5×10^{-4} Pa

[Applications]

- Ultra high-speed heating of new materials such as Silicon, Silicon carbide, and Graphene
- Production of thin films and oxide crystals
- Laser ablation and Thermal Desorption
 Spectrometer
- Installation into X-ray Photoelectron Spectrometer

[Options]

- 1. Movable thermal sensor (RS250-V)
- 2. Infrared thermal sensor (IR2S)
- 3. Gas atmosphere mechanism
- 4. Sample observation mechanism
- 5. Optical analysis mechanism
- 6. Cooling water circulation system

THERMO RIKO CO., LTD.

Specifications of Infrared Guide Section

Infrared guide section, Main unit	High-speed heating model		Ultra high-vacuum model	
	GV198	GVL298	GVH198	GVH298
Max. attainable temperature	1300°C	1500°C	1200°C	1400°C
Heating area diameter	Approx. 20 mm dia.			
Leakage	1.33×10 ⁻⁸ Pa·m ³ /sec. max.		1.33×10 ⁻¹⁰ Pa·m ³ /sec. max.	
Max. attainable vacuum degree	5×10 ⁻⁷ Pa ^{*Note 1}		5×10 ⁻⁹ Pa ^{*Note 1}	
Max. heating rate	100–150°C/sec.		1°C/sec.	

*Note 1: Varies depending on the attainable vacuum degree of the installed vacuum system.



We reserve the right to modify the specifications, appearance, and other features of the products described herein at any time and without prior notice. (3.2011)

Contact below for specifications and details of the system.



Phone: +81-422-76-2411 Fax: +81-422-75-2514 Mitaka High-Tech Center, 8-7-3 Shimorenjaku, Mitaka-city, Tokyo 181-0013 URL: http://www.kagaku.com/thermo/