# 2 Mirror IR Image Furnace by Quantum Design

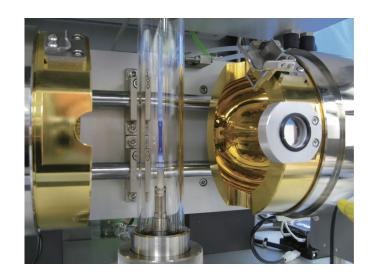


#### **Features:**

- Unsurpassed performance in a convenient, stand-alone design
- Highly efficient two-mirror design
- Gold-coated brass mirrors
- 2100° C in floating zone region
- Excellent IR power stability
- No external cooling required
- Uses standard "off the shelf" lamps
- Single phase power
- CE certified

### **Capable of Growing:**

- High temperature superconductors
- Dielectrics and magnetic materials
- Metal compounds
- Semiconductors
- Optical crystals
- Precious stones



# **New: Improved Vacuum Atmosphere**

Conveniently placed panel for access to the floating zone region including:

- Ports for inputting external gases
- Regulator for pressure control to 10 bar
- NW25 port for pumping to high pressure



## Specifications\*

\* Subject to change without notification

Lamp	Number & Type	2 Halogen 650 W Lamps
	Cooling	Integrated air blower
	Lamp power stability	0.01 V (100 V full scale)
Mirror	Туре	Two elliptical
	Temperature (floating zone region)	2100° C (4 mm material) (can reach 2150° C, T <sub>m</sub> of MgAl <sub>2</sub> O <sub>4</sub> )
Shaft control	Crystal growth speed	0.1 to 300 mm/hr
	Shaft drive	Upper & lower independently controlled
	Maximum crystal length	150 mm
	Maximum speed ( coarse mode )	24 mm/min (Position adjustment) 150mm/min (fast position adjustment)
	Rotation <sup>3</sup>	2.5 to 40 RPM
Other	Control	Via integrated touch panel display (optional control by remote PC)
	Crystal growth monitoring	Real time via CCD camera
	Max pressure (floating zone region)	1M Pa (10 bar)
	Vacuum (floating zone region)	6.7 x 10 <sup>-3</sup> Pa
	Size – All controls packaged into one stand-alone unit	Width: 80 cm Depth: 90 cm Height: 180 cm
	Weight	450 kg
	Input power	200 to 240 V, 20A, 1Φ