# **Fixed Point Black Body Furnace**

# Lineup from In point to Cu point Realization of a high quality plateau

Fixed point black body furnace, model: IR-R0A is a highly precise fixed point black body furnace that can use for the Temperature Standard for radiation thermometer.

IR-R0A has 6 kinds of fixed point cell from In (157°C) in low temperature to Cu(1085°C) in high temperature.

Furthermore, easily ejectable and replaceable heater unit and fixed point cell design.

IR-R0A has been developed with **NMIJ** (National Metrology Institute of Japan) and is able to utilize for temperature standard.

It is effective for fixed point calibration of the radiation thermometer for standards (model: IR-RST series by CHINO Corporation) in particular.



#### Feature

- Realization of a good plateau by the improvement of the temperature distribution
- ●Lineup In Cu point
- Changeable to other fixed points by cell exchange easily
- ●Compact (184×370×360mm) and lightweight (13kg)

#### **MODEL**

IR-R0A

Fixed point cell

In point: 156.60° C Sn point: 231.93° C Zn point: 419.53° C Al point : 660.32° C Ag point: 961.78° C Cu point : 1084.62° C



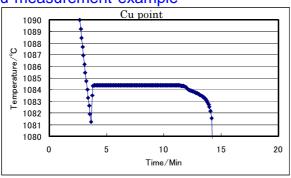


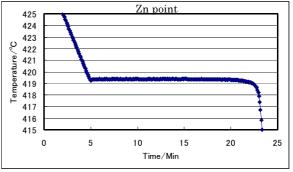


JQA-EM2414



### ■ Plateau measurement example



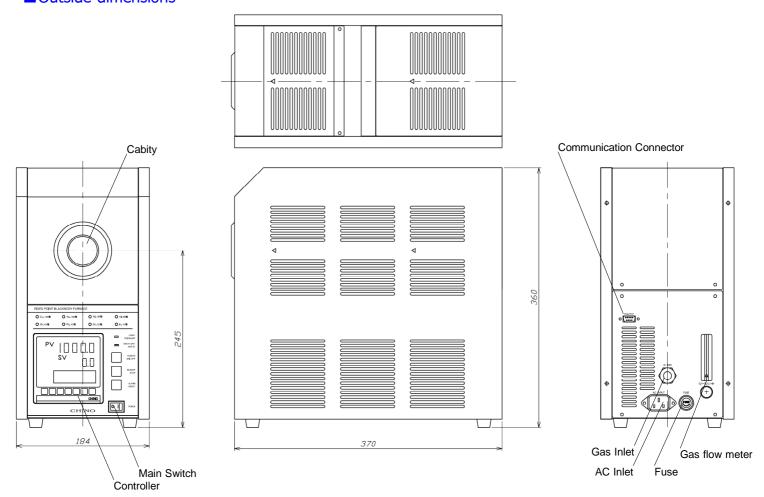


Measured by the radiation thermometerfor standard (Model : IR-RST90H, wavelength 0.9µm)

## Specifications

Cabity Material	Graphite 5%ash	Repeatability	within 10mK
Crucible Size	φ40mm ×70mm	Plateau Duration	more than 5min
Cabity Size	φ8mm ×48mm	Power Supply	100-240V AC, 50/60Hz
	with iris $\phi$ 3mm or $\phi$ 6mm	Power Consumption	750VA max.
Emissivity	more than 0.999	Operating Temperature	10-35 °C at 240V AC
Fixed Point Metals	In,Sn,Zn,Al,Ag,Cu	Heat-up Time	about 1.5h to Cu point
Metal Amount	about 27cm <sup>3</sup>	Temperature-fall Time	about 4.5h from Cupoint to 250 °C
Temperature Distributtion	within 8 °C at crucible Area	Purge	Ar gas 0.2l/min

### **■**Outside dimensions



Dimensions: 184(W)x370(D)x360(H) [mm] Weight: about 13[kg]

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