

# *Optical floating zone furnace*

Model : FZ-T-10000-H-VIII-VPO-PC



**Optical floating zone furnace**



**Crystal Systems Corporation**

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## Specifications

Model		FZ-T-10000-H-VIII-VPO-PC
Lamp system		Halogen
Number of lamp and mirror		4 pieces
Number of mirror		4 pieces
Atmospheric pressure	Pressure	0.95 MPa
	Vacuum	$6.7 \times 10^{-3} \text{Pa}$ ( $5 \times 10^{-5} \text{Torr}$ )
Chamber (Quartz tube)	Normal pressure	$\phi$ 50 mm / 365 mm long / 2 mm thick
	High pressure	$\phi$ 50 mm / 365 mm long / 5 mm thick
Sealing for shafts		O-Ring Sealing Type
Max. temperature		2,200°C
Normal temperature		1,850°C
Lamp power		1,200W (300W x 4 lamps)
		4,000W (1,000W x 4 lamps)
		6,000W (1,500W x 4 lamps)
Mirror stage/Shaft		Mirror stage and upper shaft transfer vertically
Max difference of temperature around the rod surface		< 30°C
Lamp cooling		Air
Mirror cooling		Air
Max. crystal length (mm)		150
Max. feed length(mm)		150
Growth rare slow move		0.01~300mm/hr
Growth rate fast move		6~150mm/min
Shaft rotation rate		5~100rpm
Monitoring		CCD camera and LCD
Control system	Computer	LabVIEW / Windows 10 (with remote control function)
	Manual	Hand-control-box
Atmosphere gas flow control		① 5L/min Ar flow meter(*1) ② 500cc/min Oxygen flow meter ③ 10L/min Air flow meter with compressor
Utility	Electricity	3-phase 200V, 40A
	Water	3~5L/min
Size (mm)		Main body W850×D760×H1950
		Control box W605×D760×H1700

Remarks:

1. Alternative lamp power (option): 150W / 500W / 750W
2. (\*1) It is possible to change other type of gas and flow amount.
3. Warranty:

Crystal Systems Corporation warrants for one (1) year from the date of installation, except for abnormal use. Glassware such as (1) lamp (2) mirror (3) quartz tube are out of warranty.