

# *Optical floating zone furnace*

Model : FZ-T-4000-H-VIII-VPM-PC



**Optical Floating Zone Furnace**



**Crystal Systems Corporation**

9633-1 Kobuchisawa , Hokuto , Yamanashi 408-0044 Japan

Tel:+81-551-36-5271 Fax:+81-551-36-5273

<http://www.crystalsys.co.jp/> e-mail: [csc@crystalsys.co.jp](mailto:csc@crystalsys.co.jp)

## Specification

Model		FZ-T-4000-H-VIII-VPM-PC		
Lamp system		Halogen		
No. of lamp and mirror		4 pieces each		
Atmospheric pressure	Pressure	0.95 MPa		
	Vacuum	$6.7 \times 10^{-3}$ Pa ( $5 \times 10^{-5}$ Torr)		
Sealing for shafts		Shafts are sealed with Magnetic Liquid*1 Quartz tube is sealed with O-ring		
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)		
Shaft		Upper and lower shafts transfer vertically		
Temperature difference		< 30°C		
Lamp cooling		Air cooling		
Mirror cooling		Air cooling		
Max. growth length		150 mm		
Max. gap adjustment		150 mm		
Max. feed rod length		150 mm		
Growth rare slow move		0.01~300mm/hr		
Growth rate fast move		6~150mm/min		
Shaft rotation rate		5~100rpm		
Monitoring		CCD camera and monitor (LCD)		
Control system	Computer	LabVIEW / Windows 10 (with remote control function)		
	Manual	Hand-control-box		
Atmosphere gas flow rate		① 5L/min Ar MFC ② 500cc/min O <sub>2</sub> MFC ③ 10L/min Air (Float) flow meter		
Fluctuation of power		Less than +/-0.2% against +/-10% of source		
Utilities	Electricity	3-phase 200V, 30A		
	Water	3L/min		
Size (mm)		Main body	Control box	
		Width	750	605
		Depth	800	760
		Height	2900	1640

### Remarks:

1. Alternative lamp power (option): 150W / 500W / 750W
2. 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 and (3) quartz tube are out of warranty.
4. Above specification may be changed without any notification.