

Far Infrared Ray Ovens | Far Infrared Heating

DIR631C

Forced
ConvectionAutomatic
Overheating
PreventerOverheating
PreventerSelf-diagnostic
FunctionKey Lock
FunctionPower Failure
Compensation
FunctionOvercurrent
Leakage Circuit
Breaker

Operating temp. range RT+10~360°C

Temp. distribution accuracy $\pm 3.0^\circ\text{C}$ (at 360°C)

It uses the properties of far infrared ray heaters (IR heaters) for thermal treatment of polymer materials and other applications.



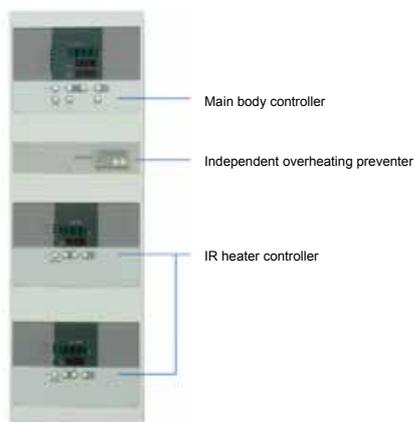
Features

- High temperature natural convection ovens with maximum operating temperature 360°C.
- Easy operation, available for fixed temp., program, quick auto stop, auto stop and auto start operations.
- Digital setting through special function menu keys and up/down keys. 6 modes with a total of 90 segments program controller.
- Overheating protection, deviation correction and key locking through submenu keys.
- Quick exhaust and cooling through exhaust dampers.

Safety

- Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit protection), independent overheating preventer, overcurrent leakage protection, key lock and other safety functions.

Control panel



Internal chamber



Specifications

Model		DIR631C	
System		IR radiation + Forced convection and ventilation	
Performance	Operating temp. range	Room temp. +10~360°C	
	GB standard	Temp. fluctuation	$\pm 0.2^\circ\text{C}$ (at 360°C, IR heater off)
		Temp. deviation	$\pm 5^\circ\text{C}$ (at 360°C, IR heater off)
	JTM standard	Temp. adjusting accuracy	$\pm 0.2^\circ\text{C}$ (at 360°C, IR heater off)
Temp. distribution accuracy		$\pm 3^\circ\text{C}$ (at 360°C, IR heater off)	
Max. temp. reaching time		100 min (from room temperature to 360°C, IR heater off)	
Composition	Main body heater	Fin-type stainless steel heating tube 3.75KW	
	IR heater	0.2KW×16 pieces×upper and lower surfaces for a total of 6.4KW	
	Motor · fan	Capacitor-type motor 20W + axial flow fan	
	Sensors	K-type thermocouple double probe×1 (for main body temperature controller and overheating preventer)	
		K-type thermocouple×2 (for IR heater, centrally embedded in IR heater)	
Cable port		I.D. 30 mm, located at the back	
Other additional functions		Exhaust vent (manual type)	
Controllers	Control method	PID control (main body)	
	Operating functions	Fixed temp. operation, quick automatic stop, automatic stop, automatic start	
	Additional functions	Deviation correction function, key lock function, power failure compensation function, door switch detection	
Safety device	Leakage circuit breaker	Leakage, short circuit, and overcurrent protection	
	Overheating preventer	Automatically cut off the heater circuit when overheating occurs	
	Self-diagnostic function	Temperature sensor abnormality, heater disconnection, SSR short circuit, automatic overheating prevention function	
Specifications	Internal dimensions (W×D×H mm)	600×600×600	
	Effective dimensions (W×D×H mm)	600×600×200	
	External dimensions (W×D×H mm)	1200×780×1000	
	Internal capacity	216L	
	IR heater upper and lower spacing	200mm	
	Weight	Approx. 230kg	
	Power supply	3-phase 380V 50/60Hz 18A	
Accessories	Shelf	Stainless steel wire mesh plate 1 pcs	
	Supports	2 pcs	
	Stand	OP62C	
Options		Shelves (1 shelf with 2 shelf supports), micro printer, data logger, combined warning light (standby/running/fault), external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, time-up output terminal, centralized monitoring software	
	Others		

1 Sterilizers

2 Granulation
and Spray
Dryers3 Muffle
Furnaces

4 Ovens

5 Incubators

6 Plasma
Equipment7 Water
Purifiers

8 Baths

9 Water
Circulators10 Rotary
Evaporators11 Freeze Dryers
& Cold Traps12 Stirrers &
Shakers

13 Washers

14 Analysis and
Test Devices

15 Options