

## 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 | 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



Main body control controller

Independent overheating preventer

IR heater controller

## 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 $\times$ 16 pieces $\times$ 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 $\times$ 1 (for main body temperature controller and overheating preventer)	
		K-type thermocouple $\times$ 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, rapid 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 $\times$ D $\times$ H mm)	600 $\times$ 600 $\times$ 600	
	Effective dimensions (W $\times$ D $\times$ H mm)	600 $\times$ 600 $\times$ 200	
	External dimensions (W $\times$ D $\times$ H mm)	1200 $\times$ 780 $\times$ 1000	
	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 Dryers

3 Muffle Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purification Systems

8 Water Baths

9 Water Circulators

10 Rotary Evaporators

11 Freeze Dryers and Cooling Traps

12 Stirrers &amp; Shakers

13 Washers

14 Analysis and Test Devices

15 Options