

Clean Room Oven - CR

General Information

The CR Series of 250 °C clean room ovens comprises nine standard models in sizes from the 30 litre model to the 1790 litre model which, once processed through a customer's standard material entry regime, are suitable for operation within an ISO 14644-1 Class 5 environment*.

All sources of particulate contamination are fully sealed. Their easily cleaned stainless steel interiors and gloss white epoxy exteriors prevent the shedding of particulate contamination.

*Federal Standard 209E Class 100 was superseded in 2001 by ISO 14644-1 Class 5



Standard features

- 250 °C maximum operating temperature
- 30 to 1810 litre chamber volumes
- Fully sealed low thermal mass insulation to avoid shedding fibres
- Fully enclosed brushless fan motor
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Perforated stainless steel shelves
- Particle free silicone rubber door seal
- Membrane control panel with clear bright LED display

Options (specify these at time of order)

- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Access port for independent thermocouple
- Cable entry ports
- Viewing window
- Frame to enable units to be stacked one upon another
- Lockable door
- Door switch to isolate elements and fan
- Fully customised through wall (flange fitted) designs are available
- Optional floor stand

Technical Specifications

Clean Room Oven - CR

CR/30

Max temp (°C)	250
Volume (litres)	30
Temp stability (°C)	±0.2
Temp uniformity (°C)	±3.0 @ 250°C
Heat-up time (mins)	35
Recovery time (mins)	4
Dimensions: Internal H x W x D (mm)	310 x 310 x 310
Dimensions: External H x W x D (mm)	65 x 460 x 670
Shelves fitted / accepted	2 / 2
Shelf loading each / total (kg)	10 / 20
Configuration	Bench-top
Max power (W)	1000

CR/70

Max temp (°C)	250
Volume (litres)	68
Temp stability (°C)	±0.2
Temp uniformity (°C)	±3.0 @ 250°C
Heat-up time (mins)	35
Recovery time (mins)	4
Dimensions: Internal H x W x D (mm)	310 x 470 x 470
Dimensions: External H x W x D (mm)	65 x 620 x 820
Shelves fitted / accepted	2 / 2
Shelf loading each / total (kg)	10 / 20
Configuration	Bench-top
Max power (W)	1500

CR/130

Max temp (°C)	250
Volume (litres)	121
Temp stability (°C)	±0.2
Temp uniformity (°C)	±4.0 @ 250°C
Heat-up time (mins)	35
Recovery time (mins)	4
Dimensions: Internal H x W x D (mm)	550 x 470 x 470
Dimensions:	925 x 620 x 820

Clean Room Oven - CR

External H x W x D (mm)	
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	10 / 40
Configuration	Bench-top
Max power (W)	2000

CR/180

Max temp (°C)	250
Volume (litres)	170
Temp stability (°C)	±0.2
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	58
Recovery time (mins)	5
Dimensions:	770 x 470 x 470
Internal H x W x D (mm)	
Dimensions:	1145 x 620 x 820
External H x W x D (mm)	
Shelves fitted / accepted	3 / 7
Configuration	Bench-top
Shelf loading each / total (kg)	10 / 50
Max power (W)	2500

CR/220

Max temp (°C)	250
Volume (litres)	227
Temp stability (°C)	±0.2
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	75
Recovery time (mins)	4
Dimensions:	610 x 610 x 610
Internal H x W x D (mm)	
Dimensions:	1360 940 x 970
External H x W x D (mm)	
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	15 / 45
Configuration	Bench-top
Max power (W)	3000

Clean Room Oven - CR

CR/330

Max temp (°C)	250
Volume (litres)	340
Temp stability (°C)	±0.2
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	80
Recovery time (mins)	6
Dimensions: Internal H x W x D (mm)	915 x 610 x 610
Dimensions: External H x W x D (mm)	1670 x 940 x 970
Shelves fitted / accepted	4 / 8
Shelf loading each / total (kg)	15 / 60
Configuration	Floor-standing
Max power (W)	4500

CR/450

Max temp (°C)	250
Volume (litres)	450
Temp stability (°C)	±0.3
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	75
Recovery time (mins)	9
Dimensions: Internal H x W x D (mm)	1220 x 610 x 610
Dimensions: External H x W x D (mm)	1750 x 780 x 850
Shelves fitted / accepted	5 / 11
Shelf loading each / total (kg)	15 / 75
Configuration	Floor-standing
Max power (W)	6000

CR/840

Max temp (°C)	250
Volume (litres)	850
Temp stability (°C)	±0.3
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	1525 x 915 x 610
Dimensions:	2235 x 1395 x 970

Clean Room Oven - CR

External H x W x D (mm)

Shelves fitted / accepted	6
Shelf loading each / total (kg)	15 / --
Configuration	Floor-standing
Max power (W)	12000

CR/1790

Max temp (°C)	250
Volume (litres)	1810
Temp stability (°C)	±0.3
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	1220 x 1220 x 1220
Dimensions: External H x W x D (mm)	1930 x 1750 x 1590
Shelves fitted / accepted	5
Shelf loading each / total (kg)	15 / --
Configuration	Floor-standing
Max power (W)	18000

Please note:

- Uniformity is measured in an empty chamber with vents closed, after a stabilisation period
- Shelf loadings are based on evenly distributed weight
- Minimum operating temperature approximately ambient +30°C
- Maximum power and heat up time based on a 240V supply
- The uniform volume is smaller than the overall chamber volume