



# 250°C & 300°C Laboratory Ovens

## General Features

- Six oven chamber sizes to choose from.
- Mechanical convection and gravity convection designs.
- 250°C and 300°C maximum operating temperatures.
- Temperature stability of  $\pm 0.2^\circ\text{C}$ .
- Chamber air circulation provides excellent temperature uniformity.
- Polished stainless steel inner chamber is easy to clean and resistant to corrosion.
- Each oven is provided with non-tilt nickel plated shelves with multi-position settings for convenient loading and unloading.
- Long-life mineral insulated metal sheathed heating elements.
- Fast heat-up and recovery rates.
- Digital temperature controller will display either setpoint or process temperatures.
- Adjustable from control panel, chamber ventilation and exhaust vent is provided in rear wall.
- Side mounted control panel avoids damage from accidental spillage.
- Efficient fibrous insulation ensures cool outer case temperatures.
- Side hinged door provides access to full width of chamber when open.



PF 30/301

- Lever action of flush fitting door latch ensures gentle closure and provides a handle when unlatched.
- Long-life mechanical design is also aesthetically attractive in today's modern laboratory.
- Choice of TLK, 301 or programmable controls.
- Multiple built-in options available. (See pages 66 & 67)

## Mechanical Convection Laboratory Ovens

Oven Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Maximum Power (kW)	Oven Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
PF 30	300	11.75 (300)	11.50 (292)	12.50 (320)	18.50 (470)	26.25 (665)	20.50 (520)	1.0	120	82
PF 60	300	15.75 (400)	15.25 (392)	16.50 (420)	22.50 (570)	30.00 (765)	26.50 (620)	1.5	120	128
PF 120	300	19.50 (500)	19.25 (492)	20.50 (520)	26.50 (670)	34.00 (865)	26.50 (670)	2.0	208/240	175
◆ PF 200	300	29.50 (750)	23.25 (592)	20.50 (520)	36.25 (920)	38.00 (965)	28.50 (720)	2.7	208/240	227
PF 400	250	59.00 (1500)	23.75 (605)	20.00 (510)	77.50 (1970)	38.75 (980)	28.50 (720)	6.0	208/240	748
PF 800	250	59.00 (1500)	47.25 (1200)	20.00 (510)	67.75 (1720)	62.50 (1585)	39.50 (1000)	9.0	208/240	960

◆ Stock Product

Ovens operate on single phase voltage.

Specify voltage at time of order.

## Gravity Convection Laboratory Ovens

Oven Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Maximum Power (kW)	Oven Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
PN 30	300	10.00 (250)	13.00 (330)	12.50 (320)	18.50 (470)	26.25 (665)	20.50 (520)	.75	120	82
PN 60	300	13.75 (350)	15.25 (392)	16.50 (420)	22.50 (570)	30.00 (765)	24.50 (620)	1.00	120	128
PN 120	300	17.75 (450)	19.25 (492)	20.50 (520)	26.50 (670)	34.00 (865)	26.50 (670)	1.50	120	175
PN 200	300	27.50 (700)	23.25 (592)	20.50 (520)	36.25 (920)	38.00 (965)	28.50 (720)	2.25	208/240	227

Specify voltage at time of order.

Ovens operate on single phase voltage.



## TYPICAL OVEN APPLICATIONS

- Drying
- Baking
- Stability Testing
- Sterilizing
- Pre-Heating
- Aging
- Curing
- Incubation
- Softening
- Soldering

## SEVERAL OVEN OPTIONS

- Programmable Controls
- Over-Temperature Controls
- Door Window
- Access Ports
- Timers
- Exhaust Fan
- Interior Light
- Chart Recorder

### Shelving Specifications by Chamber Size

SHELVES	30	60	120	200	400	800
Number Supplied	2	2	2	2	3	3
Maximum Possible	3	5	9	15	30	30
Max. Dist. Load/Shelf (lb)	22	22	22	22	22	22
Total Max. Load (lb)	44	66	88	110	165	220



PF 400/301 with optional Air Exhaust Fan

## Oven Performance Specifications

Oven Model	Holding Power at Max. Temp. (kW)	Temperature Uniformity At Max. Temp. (%)	Temperature Stability PID Control (°C)	Heat-Up Time (Minutes)			Recovery Time (Minutes) (Door Open 60 sec.)		
				100°C	200°C	300°C	100°C	200°C	300°C
PF 30	.35	+/-1.0	+/-0.2	4.5	12	25	1	2.5	4
PF 60	.60	+/-1.0	+/-0.2	4.5	12	25	1	2.5	4
PF 120	.80	+/-1.0	+/-0.2	4.5	12	25	1	2.5	4
PF 200	1.25	+/-1.0	+/-0.2	5.5	14	30	1.5	3	5
PF 400	2.20	+/- 1.7	+/- 0.2	15	40	85*	10	12	25*
PF 800	3.50	+/-1.7	+/-0.2	17	45	100*	12	15	30*
PN 30	.3	+/-2.3	+/-0.5	12	26	52	2.5	5	8.5
PN 60	.48	+/-2.3	+/-0.5	12	26	52	2.5	5	8.5
PN 120	.48	+/-2.3	+/-0.5	12	26	52	2.5	5	8.5
PN 200	1.16	+/-3.5	+/-0.5	14	29	58	3	6	10

Temperature uniformity is not based on full chamber dimensions. Contact Carbolite for details.

\*Maximum Temperature 250°C



AX 60/TLK

## General Features

- Three different chamber volumes to choose from.
- 250°C maximum operating temperature.
- Precise PID digital temperature controller.
- Mechanical convection air circulation provides excellent chamber temperature uniformity.
- Polished stainless steel inner chamber is easy to clean and resistant to corrosion.
- Each oven is provided with non-tilt nickel plated shelves with multi-position settings for convenient loading and unloading.
- Long-life mineral insulated metal sheathed heating elements.
- Fast heat-up and recovery rates.
- Digital temperature controller will display either setpoint or process temperatures.
- Exhaust vent in rear wall includes adjustable vent for control of airflow.
- Side mounted control panel avoids damage from accidental spillage.
- Efficient fibrous insulation ensures cool outer case temperatures.
- Side hinged door provides access to full width of chamber when open.
- Lever action of flush fitting door latch ensures gentle closure and provides a handle when unlatched.
- Long-life mechanical design is also aesthetically attractive in today's modern laboratory.

### Shelving Specifications by Chamber Size

SHELVES	30	60	120
Number Supplied	2	2	2
Maximum Possible	4	6	8
Max. Dist. Load/Shelf (lb)	22	22	22
Total Maximum Load (lb)	44	66	88

### Oven Performance Specifications

Oven Model	Holding Power at Max. Temp. (kW)	Temperature Uniformity at Max. Temp. (°C)	Air Exchanges in Chamber Volume Per Hour (100°C)	Temperature Stability (°C)	Heat-Up Time (Minutes)				Recovery Time (Minutes) (Door Open 60 Seconds)			
					50°C	100°C	200°C	250°C	50°C	100°C	200°C	250°C
AX 30	.32	±2.4	65	±0.2	3	6	15	23	1	1	2	3
AX 60	.475	±3.4	28	±0.2	3	7	17	25	1	1	2	3
AX 120	.65	±3.9	14	±0.2	3	7	18	26	1	1.5	2.5	3

Temperature uniformity is not based on full chamber dimensions. Contact Carbolite for details.

### Mechanical Convection Laboratory Ovens

Oven Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Max. Power (kW)	Oven Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
◆ AX 30	250	11.50 (295)	11.75 (300)	12.50 (320)	17.25 (440)	23.25 (590)	18.25 (465)	1.0	120	82
◆ AX 60	250	15.50 (395)	15.75 (400)	16.50 (420)	21.25 (540)	27.25 (690)	22.25 (565)	1.5	120	128
◆ AX 120	250	19.50 (495)	19.75 (500)	20.50 (520)	25.25 (640)	31.25 (790)	26.25 (665)	2.0	208/240	175

◆ Stock Product

Specify voltage at time of order.

Ovens operate on single phase voltage.



LHT 5/30/301

## General Features

- Three oven chamber sizes to choose from.
- 400°C, 500°C and 600°C maximum operating temperatures.
- Forced air convection provides excellent temperature uniformity.
- Temperature stability of  $\pm 0.2^\circ\text{C}$ .
- Stainless steel inner chamber is convenient to clean and resistant to corrosion.
- Long-life mineral insulated metal sheathed heating elements.
- Each oven is provided with two perforated stainless steel shelves with multi-position settings for convenient loading and unloading.
- An adjustable 1.5" diameter chamber exhaust vent is located on top of oven.
- Side mounted control panel avoids damage from accidental spillage.
- Efficient fibrous insulation provides safe outer case temperatures.
- Side hinged door provides access to full width of chamber when open.
- Lever action of flush fitting door latch ensures gentle closure and provides a handle when unlatched.
- Long-life mechanical design is also aesthetically attractive in today's modern laboratory.
- Choice of 301 or programmable controls.
- Multiple built-in options available. (See pages 66 & 67)

## High Temperature Oven Performance Specifications

Oven Model	Holding Power at Max. Temp. (kW)	Temperature Uniformity at Max. Temp. ( $^\circ\text{C}$ )	Temperature Stability PID Control ( $^\circ\text{C}$ )	Heat-Up Time (Minutes)			Recovery Time (Minutes) (Door Open 60 sec.)		
				400 $^\circ\text{C}$	500 $^\circ\text{C}$	600 $^\circ\text{C}$	400 $^\circ\text{C}$	500 $^\circ\text{C}$	600 $^\circ\text{C}$
LHT 4/30	.45	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 4/60	.69	$\pm 5$	$\pm 0.2$	50	75	120	10	16	0
LHT 4/120	1.06	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 5/30	.94	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 5/60	1.08	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 5/120	1.47	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 6/30	.98	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 6/60	1.13	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20
LHT 6/120	1.53	$\pm 5$	$\pm 0.2$	50	75	120	10	16	20

Temperature uniformity is not based on full chamber dimensions. Contact Carbolite for details.

## 400°C, 500°C & 600°C High Temperature Laboratory Ovens

Oven Model	Max. Temp. ( $^\circ\text{C}$ )	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Maximum Power (kW)	Oven Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
LHT 4/30	400	11.75 (300)	11.75 (300)	12.00 (305)	22.50 (570)	32.75 (830)	24.50 (620)	1.00	120	196
LHT 4/60	400	15.75 (400)	15.75 (400)	16.00 (405)	26.50 (670)	36.75 (930)	28.50 (720)	1.50	120	256
LHT 4/120	400	25.50 (650)	19.00 (480)	16.00 (405)	36.25 (920)	40.50 (1030)	28.50 (720)	2.25	208/240	333
LHT 5/30	500	11.75 (300)	11.75 (300)	12.00 (305)	22.50 (570)	32.75 (830)	24.50 (620)	2.00	208/240	196
LHT 5/60	500	15.75 (400)	15.75 (400)	16.00 (405)	26.50 (670)	36.75 (930)	28.50 (720)	2.25	208/240	256
LHT 5/120	500	25.50 (650)	19.00 (480)	16.00 (405)	36.25 (920)	40.50 (1030)	28.50 (720)	3.00	208/240	333
LHT 6/30	600	11.75 (300)	11.75 (300)	12.00 (305)	22.50 (570)	32.75 (830)	24.50 (620)	2.00	208/240	196
LHT 6/60	600	15.75 (400)	15.75 (400)	16.00 (405)	26.50 (670)	36.75 (930)	28.50 (720)	2.25	208/240	256
LHT 6/120	600	25.50 (650)	19.00 (480)	16.00 (405)	36.25 (920)	40.50 (1030)	28.50 (720)	3.00	208/240	333

See shelving specifications on page 65.

Specify voltage at time of order.

Ovens operate on single phase voltage.