



80°C Laboratory Incubators



PIN 30/301

General Features

- Six incubator chamber sizes to choose from.
- Mechanical convection and gravity convection designs.
- Ideal for laboratory applications requiring dry heat incubation from ambient +10°C to 80°C temperature range.
- Tempered glass inner door allows samples to be viewed without disturbing the chamber environment.
- Temperature stability of $\pm 0.2^{\circ}\text{C}$.
- Chamber air circulation provides $\pm 1.0^{\circ}\text{C}$ temperature uniformity.*
- Polished stainless steel inner chamber is easy to clean and resistant to corrosion.
- Each incubator is supplied with non-tilt nickel plated shelves with multi-position height settings for convenient loading and unloading.
- Precise digital temperature controller will display either set point or process temperatures.
- Fast heat-up and recovery rates.
- Long-life mineral insulated metal sheathed heating elements.
- 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.
- 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 Incubators

Incubator Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Maximum Power (Watts)	Incubator Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
PIF 30	80	11.75 (300)	11.50 (292)	12.50 (320)	18.50 (470)	26.25 (665)	20.50 (520)	250	120	86
PIF 60	80	15.75 (400)	15.25 (392)	16.50 (420)	22.50 (570)	30.00 (765)	24.50 (620)	700	120	135
PIF 120	80	19.50 (500)	19.25 (492)	20.50 (520)	26.50 (670)	34.00 (865)	26.50 (670)	700	120	183
PIF 200	80	29.50 (750)	23.25 (592)	20.50 (520)	36.25 (920)	38.00 (965)	28.50 (720)	1000	120	245
PIF 400	80	59.00 (1500)	23.75 (605)	20.00 (510)	77.50 (1970)	38.75 (980)	28.50 (720)	2000	208/240	748
PIF 800	80	59.00 (1500)	47.25 (1200)	20.00 (510)	67.75 (1720)	62.50 (1585)	39.50 (1000)	4000	208/240	975

Specify voltage at time of order.

Incubators operate on single phase voltage.

Gravity Convection Laboratory Incubators

Incubator Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			Maximum Power (Watts)	Incubator Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth			
PIN 30	80	10.00 (255)	13.00 (330)	12.50 (320)	18.50 (470)	26.25 (665)	20.50 (520)	250	120	86
PIN 60	80	13.75 (350)	15.25 (392)	16.50 (420)	22.50 (570)	30.00 (765)	24.50 (620)	550	120	135
PIN 120	80	17.75 (450)	19.25 (492)	20.50 (520)	26.50 (670)	34.00 (865)	26.50 (670)	700	120	183
PIN 200	80	27.50 (700)	23.25 (592)	20.50 (520)	36.25 (920)	38.00 (965)	28.50 (720)	1000	120	245

Incubators operate on single phase voltage.



INCUBATOR APPLICATIONS

- Bacterial Research
- Curing
- Hermatological Testing
- Enzyme Digestion Studies
- Coliform Determinations
- Crystallization Studies
- Tissue Culturing
- Histochemical Procedures
- Dry and Staining Procedures
- Microbiological Determinations



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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 Maximum Load (lb)	44	66	88	110	165	220

Incubator Performance Specifications									
Incubator Model	Holding Power at Max. Temp. (Watts)	Temperature Uniformity at Max. Temp. (%)	Temperature Stability PID Control (°C)	Heat-Up Time (Minutes)			Recovery Time (Minutes) (Door Open 60 sec.)		
				37°C	60°C	80°C	37°C	60°C	80°C
PIF 30	115	±1.5	±0.2	2.5	8.5	16.5	1.0	2.0	3.5
PIF 60	150	±1.5	±0.2	3.0	7.0	12.0	0.5	1.0	1.5
PIF 120	200	±1.5	±0.2	3.0	8.5	15.5	1.0	1.5	2.5
PIF 200	300	±1.5	±0.2	4.0	12.0	23.0	1.5	3.0	5.0
PIF 400	530	±2.0	±0.2	15.0	40.0	85.0	10.0	12.0	25.0
PIF 800	840	±2.0	±0.2	17.0	45.0	100.0	12.0	15.0	30.0
PIN 30	70	±3.5	±0.5	6.5	12.5	18.0	0.5	1.0	1.5
PIN 60	95	±3.5	±0.5	6.5	12.5	18.0	1.0	2.5	3.0
PIN 120	140	±3.5	±0.5	6.5	12.5	18.0	2.0	3.5	4.5
PIN 200	250	±3.5	±0.5	8.0	16.0	25.0	2.5	4.0	6.0

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