

## MIR Incubators Refrigerated Incubators



### Versatile Applications

The Panasonic MIR series offer accurate temperature control and consistent uniformity making them suitable for laboratory culturing, industrial incubation, and various testing applications.

### Wide Temperature Range

Multiple programming capability through wide temperature range (-10°C up to +60°C) with excellent chamber uniformity.

### Ergonomic Cabinet Design

Improved usability with modern design, reversible door, adjustable low vibration, and gentle air circulation that reduces media drying.

Energy Savings



Optimum Footprint



Maximum Control



4.3 cu.ft. | 8.4 cu.ft. | 14.3 cu.ft



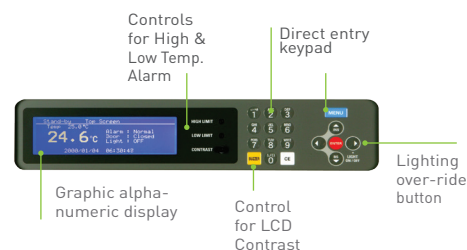
### Temperature Range

The Panasonic MIR series offers accurate temperature control and uniformity in a wide range of temperatures, making them suitable for various testing applications.



### Microprocessor Controls

The MIR-Series incorporates an 8-bit microprocessor controller for heat and refrigeration control  $\pm 0.2^\circ\text{C}$ .



### Applications

The MIR-154-PA, MIR-254-PA, and MIR-554-PA refrigerated incubators are ideal in testing applications such as:

- Industrial testing in the electrical, machinery, textile industries.
- Chemical testing, e.g., stability, acid/alkali, durability.
- Food industry for packaging, quality control and stability.
- Testing for waste water, BOD, and soil.
- Microorganism culturing, germination experiments, and nucleic acid cloning ligations.



# MIR Incubators

## Refrigerated Incubators

MIR series incubators are designed for general laboratory applications requiring fixed setpoint or cycling temperature control.

### Programmable

The MIR series are completely programmable, allowing for direct numeric input with memory of operation, start dates and hours, clock mode and counter-down mode.

### LCD Controller

The new LCD Controller improves user interface for better programming and control. The controller features a pop-up menu that can display: Current conditions (temperature, date), alarm condition, door and light status, various setting for each program (e.g. 12 step, 10 program, etc.)

### Temperature Control

The microprocessor allows for precision temperature control combined with a heater P.I.D. and compressor ON-OFF system. With a feed forward function that inputs the operating conditions of the compressor beforehand, the system ensures accurate temperature control for the chamber.

### Memory Back-up Mechanism

Should the power source be interrupted due to power failure or other event, programmed data remains stored in memory semi-permanently. When the power source is restored, operation can be continued according to the predetermined program.

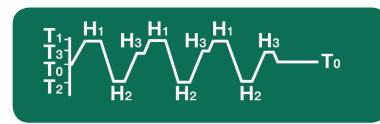
### Programmable operational functions

Program input is simple and accommodates a range of diversified experimentation requirements. It is ideal for experimentation during night time, weekends, or that requires settings to be changed. It is also ideal for microorganism cultures and preservation.

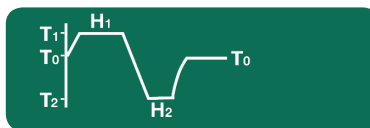
Temperature of T1, T2, and T3, correspond to times H1, H2, and H3, respectively. Then, constant operation temperature T0 is retained.



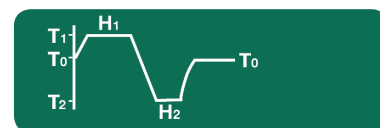
3 Step to Constant Operation



3 Step Repeat Operation



2 Step to Repeating Operation



2 Step to Constant Operation

MODEL NUMBER	MIR-154-PA	MIR-254-PA	MIR-554-PA
EFFECTIVE CAPACITY	4.3 cu.ft. 123 L	8.4 cu.ft. 238 L	14.3 cu.ft. 406 L
EXTERIOR DIMENSIONS W X F-B X H	27.6" x 22.8" x 40.1" 700 x 580 x 1018 mm	27.6" x 22.8" x 63.7" 700 x 580 x 1618 mm	31.5" x 32.8" x 71.3" 800 x 832 x 1810 mm
INTERIOR DIMENSIONS W X F-B X H	24.4" x 14.5" x 21.9" 620 x 368 x 555 mm	24.4" x 14.5" x 42.8" 620 x 368 x 1088mm	25.2" x 21.7" x 45.7" 640 x 550 x 1160 mm
DOOR	Reversible painted steel & triple pane glass with observation window		Painted steel & triple pane glass with observation door & key
SHELVES	3, PE coated steel wire, adjustable	5, PE coated steel wire, adjustable	5, PE coated steel wire, adjustable
INSULATION	Foam-in-place rigid polyurethane		
COMPRESSOR	150W, Hermetic Type	250W, Hermetic Type	250W, Hermetic Type
DEFROSTING SYSTEM	Selectable manual start or timer defrost, natural vaporisation of drain water		
HEATER	141W, Cord Heater	218W, Cord Heater	332W, Cord Heater
TEMPERATURE CONTROL	Microprocessor P.I.D system, (when compressor operates, ON/OFF control)		
AUTOMATION SETTING TEMPERATURE ALARM	When temperature deviates approx. $\pm 2.5^{\circ}\text{C}$ , visual and audible alarm		
TEMPERATURE CONTROL RANGE	$-10^{\circ}\text{C}$ to $60^{\circ}\text{C}$ (ambient temperature: $5^{\circ}\text{C}$ to $35^{\circ}\text{C}$ , no load)	$-10^{\circ}\text{C}$ to $60^{\circ}\text{C}$ (ambient temperature: $5^{\circ}\text{C}$ to $35^{\circ}\text{C}$ , no load)	$-10^{\circ}\text{C}$ to $60^{\circ}\text{C}$ (ambient temperature: $5^{\circ}\text{C}$ to $35^{\circ}\text{C}$ , no load)
TEMPERATURE UNIFORMITY	$\pm 0.5^{\circ}\text{C}$ (Temperature setting $37^{\circ}\text{C}$ , ambient temperature $20^{\circ}\text{C}$ , no load)		
POWER SOURCE: VOLTAGE	115V / 60Hz / 1 phase		
POWER CONSUMPTION	160 W	240 W	290 W
INTERIOR LAMP	15 W x 1, fluorescent lamp (setting temperature $+5^{\circ}\text{C}$ to $50^{\circ}\text{C}$ )		
NET WEIGHT	172 lbs 78 kg	238 lbs 108 kg	430 lbs 195 kg