



MIR-554-PE

# MIR Cooled Incubators

406 L

#### All-round performance

The MIR-554 Cooled Incubator is suitable for a wide range of applications. This incubator offers precise, repeatable control of programmable temperatures and lighting patterns, which are essential to biological research and environmental studies.

# Repetitive Operation & Operability

Precise, repeatable control of programmable temperatures and lighting patterns. A program can be set to repeat for a minimum of one time to a maximum of 98 times or continuous repeat.

## High-precision Temperature Control

Precise temperature control with a high precision microprocessor combined with a heater PID and compressor on/of system. The temperature control ranges from -10°C to +60°C

#### Intuitive Operation

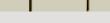
A LCD control panel with touch keyboard displays temperature and time, and allows easy setting of parameters. Operation data can be auto-recorded and graphically displayed.



#### **Diverse experiments**

Ideal for experimentation during night time and holidays, experimentation that requires settings to be changed, micro-organism culture and preservation.

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#### **Condensation prevention**

A humidity reduction mode helps reduce inner chamber condensation that may occur during high temperature operation.



### Wide temperature control range from -10°C to +60°C

With a wide temperature range from -10°C to +60°C, the MIR-554 Cooled Incubator allows a full range of precise experiments including environmental tests to micro-organism cultures and plant germination tests.

#### MIR Cooled Incubators



### Improved experimentation of repetitive operation and operability

### Programmable operation function with microprocessor control

Combining flexible temperature (H), light on/off (L) and time control (T), a maximum 12-step plus constant operation or max. 12-step repeating operation can be programmed according to the experimentation requirements. A program can be set to repeat for a minimum of one time to a maximum of 98 times or continuous repeat. The MIR-554 Cooled Incubator also offers the choice of timer mode, 24-hour clock mode and timer mode to suit user experiments. Up to 10 programs can be stored for convenient retrieval and set-up of frequently run experiments. Individual programs can be combined using the join function. Constant operation mode without step operation is also available.

#### **Energy savings**

In addition to a microprocessor-controlled high efficient heater output and compressor on/off, an updated control program and low heat-emission inner chamber fan have been incorporated to allow high energy saving operation over a wider range of ambient environments.

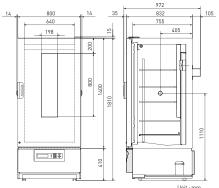
#### Light timer control

On/off programmed timer control for standard equipped fluorescent light (15W x 1pc) is available. Optional light addition kit (MIR-L15) can add three more fluorescent lights into the chamber ceiling, giving approx. 3000 lux at 30cm below from the light sources.

| Model Number  |        | MIR-554-PE  |
|---|--------|---|
| Dimensions  |        |   |
| External dimensions (W x D x H) <sup>1)</sup>         | mm     | 800 x 832 x 1810  |
| Internal dimensions (W x D x H)                       | mm     | 640 x 550 x 1160  |
| Volume  | liters | 406   |
| Net weight  | kg     | 195   |
| Performance   |        |   |
|   |        | -10 ~ +60 (AT; +5 ~ +35, no load), ±0.2 with Heater PID control |
| Temperature control range & fluctuation               | °C     | (SV 50), ±1.5 with Compressor control (SV 5)                    |
|   |        | PID control: 10°C above AT                                      |
| Temperature uniformity                                | °C     | ±0.5 SV (35)  |
| Performance ambient temperature                       | °C     | 20, no load   |
| Control   |        |   |
| Temperature sensor                                    |        | Thermistor  |
| Refrigeration   |        |   |
| Compressor  |        | 250   |
| Refrigerant*  |        | R-513A  |
| Refrigerant weight                                    | g      | 240   |
| Refrigerant GWP                                       |        | 631   |
| Total Refrigerant weight (CO <sub>2</sub> equivalent) | t      | 0,152   |
| Cooling method  |        | Forced air circulation  |
| Insulation material                                   |        | PUF   |
| Insulation thickness                                  | mm     | 80  |
| Construction  |        |   |
| Exterior Material                                     |        | Painted steel   |
| Interior Material                                     |        | SS SUS-304  |
| Outer door  | qty    | 1   |
| Outer door lock                                       |        | Υ   |
| Inner door  | qty    | 2 small inner doors (MIR-55ID option) MIR-LP option             |
| Shelves   | qty    | 5   |
| Max. load per shelf                                   | kg     | 50  |
| Max. total load                                       | kg     | 250   |
| Access port   | qty    | 2   |
| - position  |        | left and right side   |
| - diameter  | Ø mm   | 40  |
| Interior fluorescent lamp                             |        | 1, 15, with MIR-L15-PE <sup>2)</sup> option                     |
| Alarms  | (1     | R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)           |
| Power failure   |        | R   |
| High temperature                                      |        | V-B-R   |
| Low temperature                                       |        | V-B-R   |
| Door open   |        | V-B   |
| Electrical and noise level                            |        |   |
| Power supply  | ٧      | 230   |
| Frequency   | Hz     | 50  |
| Noise level <sup>3</sup>                              | dB(A)  | 45  |
| Options   |        |   |
| Additional illumination kit                           |        | MIR-L15-PE  |
|   |        |   |
| Inner doors   |        | MIR-55ID-PW   |

Appearance and specifications are subject to change without notice

other external projections <sup>21</sup>MIR-L15-PE operates between +2°C and +50°C <sup>31</sup> Nominal value, Background noise 20dB \* Complies with Art. 11, Annex III of F-Gas Regulation [EU] No 517/2014. Contains fluorinated greenhouse gases.







PHC Europe B.V.

<sup>&</sup>lt;sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections