

# **Cooling Incubators**



REMI Cooling Incubators are designed for applications in pharmaceutical, microbiology, biotechnology, chemical & research labs. These chambers are used for BOD test culture of bacteria, microorganism, tissue culture, incubation, immunological work & storage of vaccines

These incubators are available in standard & GMP versions.



# Salient Features:

- Temperature range 5°C to 60°C
- Unique design of thermal barrier for better energy efficiency
- Machine filled PUF insulation to eliminate void pockets
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber
- Heating by long life SS tubular heaters
- Chamber calibration port on side
- Adjustable trays
- Hermetically sealed Compressor with CFC free refrigerant
- High temperature safety cut off & alarms for high / low set parameters
- Sensor failure alarm
- Electrical circuit breaker
- Time delay for compressor switch on
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Microprocessor controller with LED display of Temperature with set, process value & audio visual alarm (standard)

#### **Optional**

- (i) 4" LCD display with additional features (Details overleaf)
- (ii) Touch screen display ( TFT ) with additional features(Details overleaf)
- (iii) Validation protocol with IQ, OQ, PQ Documentation



# **Cooling Incubators**

## **LCD** Display

#### **Features**

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Power failure and resumption recorded with date and time
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm
- PC communication through RS-485 with data acquisition software
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## **Touch Screen Display**

#### **Features**

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 10,000 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- PC communication through REMI Datasoft
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions

### REMI 'Data Soft'

#### **Features**

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with Lan connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers

### **Optional Accessories**

#### To be Ordered separately

- Chamber illumination with the help of 2 Nos. fluorescent tubes
- Chamber illumination with 2 Nos. ultra violet lights
- 24 hours Cyclic Timer for regulating illumination conditions
- Data logger for 8 Point temperature recording with sensor printer interface and software
- Seven days circular chart recorder
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- GSM alert through SIM card

Technical Data							
	Cl-6 Plus	CI-10 Plus	CI-12 Plus	CI-16 Plus	Cl-19 Plus	CI-28 Plus	CI-35 Plus
Internal Volume (Litres)	200	280	370	450	540	800	1000
Number of tray	2	3	4	5	6	6	7
Internal Dimensions W x D x H (mm)	660 x 655 x 450	660 x 655 x 650	660 x 655 x 850	660 x 655 x 1050	660 x 655 x 1250	800 x 800 x 1250	800 x 800 x 1580
External Dimensions W x D x H (mm)	800 x 1095 x 1020	800 x 1095 x 1220	800 x 1095 x 1420	800 x 1095 x 1620	800 x 1095 x 1820	960 x 1370 x 1950	960 x 1370 x 270
Temperature Range & Accuracy	5°C to 60°C, ± 0.5°C						
Temperature control	Microprocessor with PT-100 sensor						
Display	1" - 7 Segment, Big Size LED						
Power Failure Alarm	Visual Alarm						
Door Open Alarm	Audio Visual Alarm in case door open for over one minute						
Temperature Variation Alarm	Set Temperature $\pm~2^{\circ}$ C, Audio Visual Alarm						
Illumination	8 Watts Fluorescent Tube						
Internal Body Material	Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)						
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)						
Insulation	70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam						
Noise Level	Less Than 65 db(A)						
Recommended Voltage Stabilizer	VS-02	VS-02	VS-02	VS-03	VS-03	VS-06	VS-06

Supply: 220-240 Volts, 50 Hz Single Phase.