# Thermoline

# Laboratory Equipment Refrigerated Incubator

Designed and manufactured in Australia by Thermoline Scientific

ABN: 80 000 859 129 Head Office: 10-12 Ross Place Wetherill Park NSW 2164 Australia Phone: +61 2 9604 3911 Email: hello@thermoline.com.au Web: www.thermoline.com.au

# **Proudly Family-Owned and Operated** Today, we remain a proud second-generation family business





# Laboratory Equipment Refrigerated Incubator

Designed and Manufactured by Thermoline Scientific

This Australian made refrigerated incubator has been specifically designed to house laboratory equipment in a controlled environment. The laboratory equipment plugs into an independent power outlet outside of the incubator. The temperature is factory set at 22°C. The STAR X 10" touch screen controller allows for accurate temperature control as well as a range of logging features, alarms and temperature charts.

#### Australian Made Refrigerated Incubator

• Specifically designed for the operation of powered laboratory equipment with heat output up to 200 watts

- Independent power supply for equipment placed inside
- Temperature is factory set at 22°C
- Audible and visual alarms
- · STAR X 10" touch screen controller with logging
- Forced air circulation provides uniform air flow and temperature control
- · Lockable castors for easy movement
- · Battery backup for logging and alarm systems only

### "This product is Proudly Australian Made."

Thermoline Scientific have been manufacturing and distributing high quality laboratory and scientific testing equipment since 1970. Over this time, Thermoline has grown to be a leading brand in the science industry.





# "Built to last, using the best materials."

Thermoline Scientific uses the best materials that are able to withstand prolonged use and maintain their structural integrity. Materials such as Galvanised Steel, Aluminium, Zinc and Stainless Steel are commonly used in products that are subject to wear and tear. Benefits of these materials include:

- Corrosion resistance.
- Lightweight.
- High load stress resistance.
- Low Maintenance.

# Our difference is in our commitment

For over 50 Years we have provided industry leading equipment and service



## **Laboratory Equipment Refrigerated** Incubator

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### "Providing the new industry standard since 1970."

Since 1970, Thermoline lab equipment has been the proven industry standard. Our products appear in thousands of labs across the country and have been trusted for all general or critical research applications.

#### Warranty:

Thermoline offers a comprehensive two years parts and labour warranty on all Australian Made products.

#### Australian Made:

The TMLR-200 model is designed and manufactured by Thermoline. We proudly promote and support the Australian Made logo.

#### **Proven Reliability:** 0

With Thermoline's longstanding track record of consistent performance through the use of durable materials and rigorous testing, you can trust in our product's dependable performance.

#### Star X 10" Touchscreen:

The STAR X touch screen control system offers battery backed up control with audible deviation alarm (high and low), visual alarm and power loss alarm. The STAR X logs performance data for as download the logged data

#### **Fan Forced Air Circulation:** 0

Fan-forced air circulation is a process of circulating air using a fan to distribute it evenly throughout the space. Circulating the air has several benefits, including much better temperature uniformity throughout the workspace and increased efficiency due to reducing the workload on heaters.

**Over-temperature Safety:** 0

> The digital temperature control incorporates an automatic over-temperature alarm which will activate and shut down power to the heating elements in the case of a temperature malfunction.

#### **Multiple Port Holes**

A 13mm port hole allows for cables that may be used for external temperature monitoring. A second port hole (54mm) provides access for power and BMS leads operating additional powered equipment inside the cabinet.







long as 365 days. Operators can also to a USB and then view data via an Excel spreadsheet.

# Laboratory Equipment Refrigerated Incubator

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The incubator has a unique auto-test feature which allows for two main functions:

#### 1) Alarm test

By accessing the temperature auto-test, the user is able to see a simulation of a high temperature alarm (24°C) and a low temperature alarm (20°C) without affecting the actual temperature inside the cabinet. This simulation will trigger the BMS relay so the remote monitoring of the alarms can also be checked.

- Decreases to 20°C in 2 minutes.
- Holds 20°C for 4 minutes.
- Increase to 24°C in 4 minutes.
- Holds 24°C for 4 minutes, then stops and recovers naturally.

#### 2) Calibration test

This allows a Calibration Technician to check the linear accuracy over a 10°C range. Alarms will also be activated during this test.

- Decreases to 17°C in 5 minutes.
- Holds 17°C for 15 minutes.
- Increase to 27°C in 10 minutes.
- Holds 27°C for 15 minutes, then stops and recovers naturally.

Every 7 days there is an automated Battery Health Test. This test disconnects the battery charger and if the voltage drops below 22vDC in 5 minutes, an alarm is triggered notifying the operator that the battery has failed.

Dimensions		
External	TMLR-200	
WxDxH (mm)	740x840x1100	
Internal		
Width (mm)	600x550x530	
Clearance	TMLR-200	<u>م</u> ] <b>\$\$\$\$\$\$\$\$</b>
Front (mm)	740	
Back (mm)	100	
Sides (mm)	100	

## Laboratory Equipment Refrigerated

### Incubator

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Technical Specification	TMLR-200	
Temperature Range	Factory set at 22°C with alarm setpoints at 20.5°C and 23.5°C	
Temperature Control Stability	+/- 0.1°C	
Temperature Uniformity	+/- 1.0°C	
Nominal Capacity	200L	
Refrigeration	Internal equipment maximum heat output of 200 watts	
Porthole Diameter	1x 13mm, 1x 54mm	
Weight	90kg	
Electrical	450W/230V	
Features		
Castors	1	
Fan Forced Air Circulation	1	
STAR 700 7" Touch Screen Controller	1	
Door Lock	1	
BMS Plug	1	
Ecofoam Insulation	1	
Safety		
Over Current Protection	1	
Over Temperature Safety	1	
Options		

Adjustable Feet On request



CSD-045-V2

# We are proudly Australian owned

We will continue to invest in Australian manufacturing.

