



Envirotherm

*Designed and manufactured in Australia by
Thermoline*

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Envirotherm

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The Humiditherm "Envirotherm" cabinets feature an extended temperature range over the standard Humiditherm cabinets, offering you a greater temperature control envelope. Featuring the ability to store or test your products down to -35°C or as high as $+120^{\circ}\text{C}$ the Envirotherm range comes in our standard 460L and 850L sizes and is most often used for scientific research, product testing, and quality control.

Thermoline has two Envirotherm Temperature and Humidity Cabinets available, both designed and manufactured in Australia. These durable and reliable models make them an ideal choice for all test samples requiring precise humidity and temperature control.

The Envirotherm cabinets feature an extended temperature range over the standard Humiditherm cabinets. These higher-performing cabinets allow for -35°C to $+120^{\circ}\text{C}$ temperatures giving greater flexibility and the opportunity to expose your samples to more extreme environments at a budget-friendly price point.

"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.**



Proudly Family-Owned and Operated

Today, we remain a proud second-generation family business



A family owned Australian business



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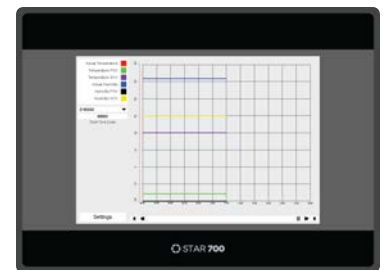
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"Providing the new industry standard since 1970."

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.

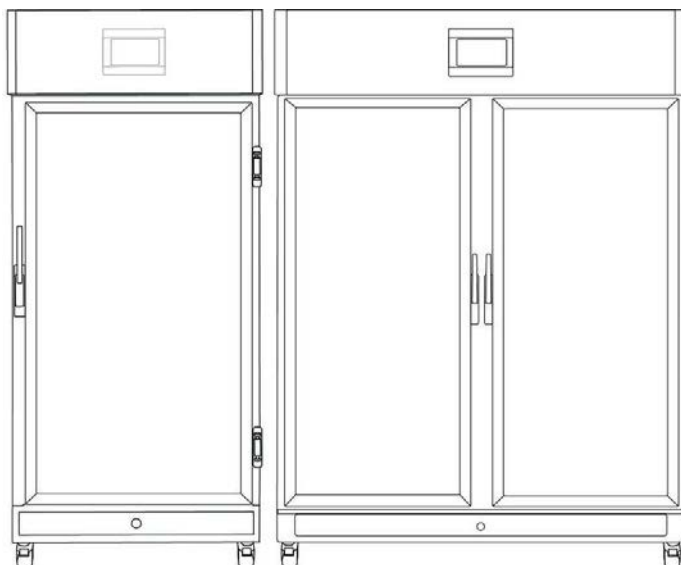


- **Australian Made:**
This range is designed and manufactured by Thermoline. We proudly promote and support the Australian Made logo.
- **Fan Forced Air Circulation:**
All TEC cabinets feature fan-forced air circulation. This results in a temperature spatial uniformity better than $\pm 2.0^{\circ}\text{C}$ (unloaded) and quick recovery times after door openings.
- **Stainless Steel Interior:**
Stainless steel is durable, easy to clean and resistant to corrosion, making it the perfect choice for high-humidity environments. 316 Stainless steel is used here to ensure the most corrosive-resistant liner.
- **Trough Humidification:**
The TEC cabinets provide humidification control via a heated water trough and bare pipe evaporator. This provides quick and stable humidity control and avoids the need for ultrasonics which may disturb live samples such as those used in Drosophila research.
- **Star X 10" Touchscreen:**
The STAR X touchscreen control system offers easy to program diurnal control of temperature, lighting, humidity and carbon dioxide. The STAR X logs performance data for as long as 365 days. Operators can also download the logged data to a USB and then view data via an Excel spreadsheet.
- **Fully Adjustable Stainless Steel Shelves:**
Adjustable interior shelves allow for increased storage capacity and organisation by allowing for customisation, flexibility to accommodate different sizes and shapes of items, easy cleaning of interior and cost effective solutions as the unit can be adapted to different needs.



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Note: Cabinets positioned side-by-side require at least 500mm between them.

Dimensions

External

TEC-460-SD

TEC-850-SD

WxDxH (mm)

840x1040x2020

1360x1040x2020

Internal

WxDxH (mm)

650x650x1105

1170x650x1105

Clearance

TEC-460-SD

TEC-850-SD

Front (mm)

820

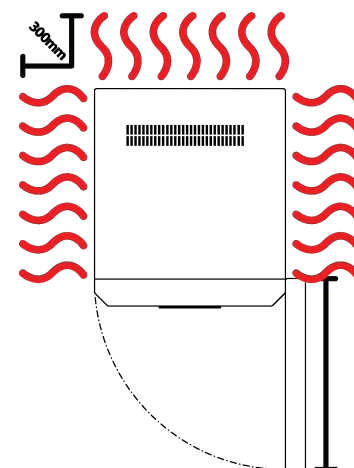
750

Back (mm)

300

Sides (mm)

300



See our Climatron range!
360L, 520L and 1100L

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Technical Specifications

TEC-460-SD

TEC-850-SD

Temperature Range

-35°C to +120°C

Temperature Control Stability

+/- 0.2°C

Temperature Uniformity

+/- 2.0°C

Humidity Range

30% to 95%RH (within +10°C to +90°C temp range) as per Control Envelope

Humidity Uniformity

+/- 5%RH

Heat Removal Capacity @ 10°C

600 watts

800 watts

CO2 Range (Optional)

Ambient to 3000 PPM (temperature limited to 60°C)

Porthole Diameter

50mm

Electrical

15A/230V

Nominal Capacity

460L

850L

Weight

250kgs

360kgs

Heat Output

700 watts to 2700 watts (dependant on operating conditions)

Noise Level @ 1 metre (dbA)

59

Refrigerant Type

R507



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Features

	TEC-460-SD	TEC-850-SD
Shelves	4	4 levels
Lockable Castors	✓	✓
Star X Touch Screen	✓	✓
Ethernet Port	✓	✓
Download data to USB	✓	✓
Battery Backed-up Alarms	✓	✓
Trough Humidification	✓	✓
BMS	✓	✓
Supply Line Water Filters 1x Carbon, 1x Sediment	✓	✓
Fibreglass Insulation	✓	✓

Safety

Over Current Protection	✓	✓
Over Temperature Safety	✓	✓
Element Safety Cut Out	✓	✓

Options

Additional Shelves	Additional stainless steel shelves and clips can be supplied
Heavy Duty Shelves	Update to allow for higher loads on shelves (limits total number of shelves possible for use)
Viewing Window	Viewing window located in the door
55L Pump Water Feed Tank	Pump feed water supply where mains water is unavailable
CO2 Control	Set Point Control of CO2 Between Ambient and 3000ppm (temperature limited to 60°C)
Additional Portholes	Additional 50mm port holes can be added to the side walls

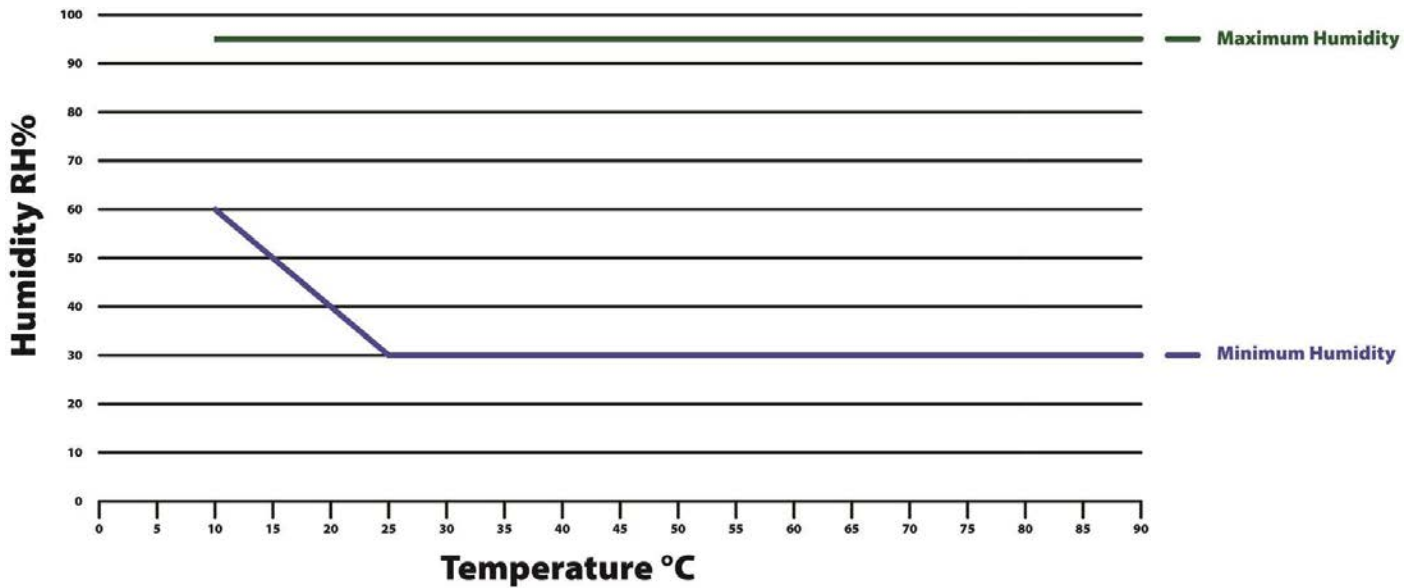


2 Year Warranty!
Thermoline offers a comprehensive two years parts and labour warranty on all Australian Made products.

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Control Envelope for TEC cabinets.



Please note: Humidity is not controlled lower than +10°C and above +90°C.

The temperature and humidity data depicted in the above control envelope is based using an empty cabinet and ambient conditions of between 22-24°C and 50-70% RH. Ambient conditions outside this range can affect the cabinet's ability to reach the above temperature and humidity values.

Customisation

A lot of the products we manufacture can be customised to suit your space or samples. Speak to our friendly customer service team about customising your environmental chamber in a way to suit your needs.



See our Door
Lighting range!
460L and 850L

We are proudly Australian owned

We will continue to invest in Australian
manufacturing.

