



Humiditherm

*Designed and manufactured in Australia by
Thermoline*

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Proudly Family- Owned and Operated

Today, we remain a proud second-generation family business



A family
owned
Australian
business



Humiditherm

Designed and Manufactured by **Thermoline**

Our Australian Made temperature and humidity cabinets control and maintain specific temperature and humidity levels within the cabinet for various applications such as storage and testing of temperature-sensitive materials, electrical components, stability testing of pharmaceuticals, prescription medicines and shelf life testing. A programmable colour touchscreen precisely controls temperature and humidity conditions so you can set and forget to carry on doing your research and development, knowing your TRH cabinet will provide the reliability and accuracy Thermoline is known for.

Thermoline has four Temperature and Humidity Cabinets available, all 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.

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

"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



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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.

2 Year Warranty!

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



- **Australian Made:**

This range is designed and manufactured by Thermoline. We proudly promote and support the Australian Made logo.
- **Star X 10" Touchscreen:**

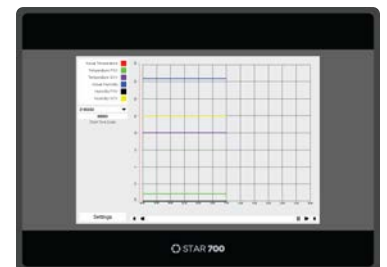
The STAR X touchscreen control system offers easy to program diurnal control of temperature, lighting, humidity and carbon dioxide. The STAR X logs performance data for as long as 365 days. Operators can also download the logged data to a USB and then view data via an Excel spreadsheet.
- **Optional Water Feed Tank:**

Where mains water cannot be supplied, the optional water tank allows for water to be pumped to the cabinet. The 55L pump tank features a self-priming 12V diaphragm pump, low water cut-out, an extra long 6m hose and a large opening for easy filling.
- **Fan Forced Air Circulation:**

All TRH cabinets feature fan-forced air circulation. This results in a temperature spatial uniformity of $\pm 2.0^{\circ}\text{C}$ (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 TRH 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.



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"NEW! The deflector allows for side by side positioning of the temperature and humidity cabinets."

Thermoline Ventilation Deflectors work by redirecting the flow of warm air exhausted from the refrigeration system upwards. This allows for side by side positioning of the cabinets, avoiding exhausted air being drawn into the next cabinet that may initiate overheating.



◦ **Viewing Door Option:**

The viewing door option allows the user to view samples without compromising the internal conditions. Closing the outer door prevents continuous exposure to light.

VD = Viewing Door

◦ **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.

◦ **Glass or Solid Door Options:**

Both glass and solid door options provide the user with further versatility to better suit their application. Solid door benefits including increased refrigeration and humidity capabilities while glass doors allow for easier monitoring of your product and samples.

SD = Solid Door

GD = Glass Door

◦ **TRH with Lighting:**

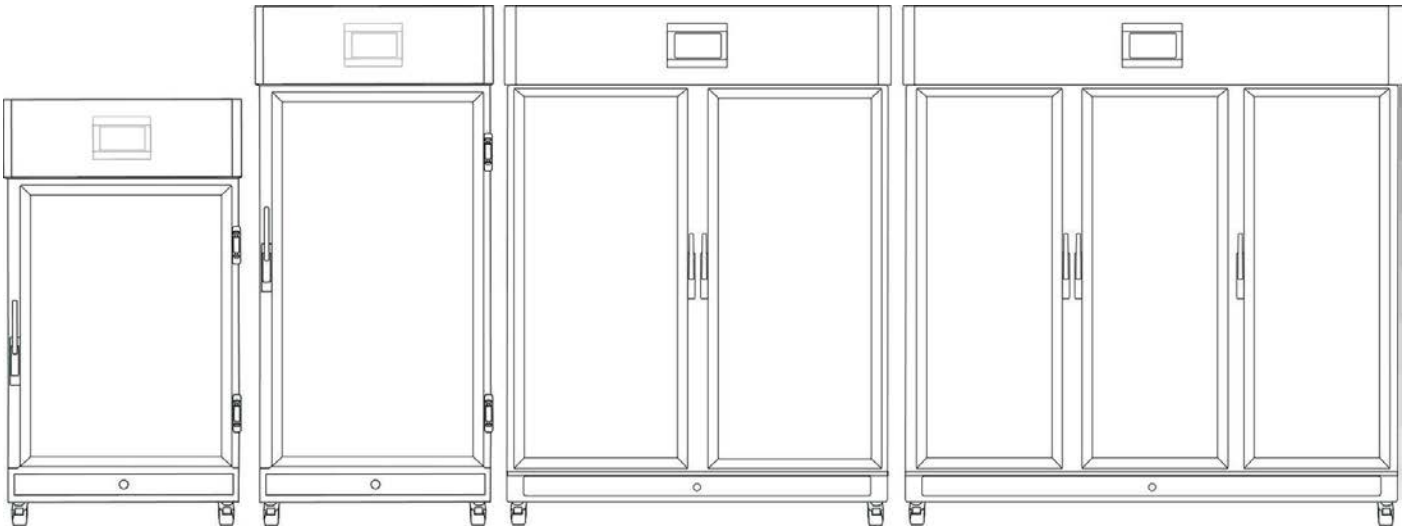
The Humiditherm temperature and humidity chambers are also available with either door-mounted or shelf-mounted LED lighting. There are two main variations in this series. The first, the TRHDL, has lighting fitted to the outside of the glass door, permitting light energy to pass through the glass, thus eliminating heat generated by the lights. The second variation, the TRHSL, has shelf lighting to allow better light distribution per shelf. High-output LED lighting is used in both variations.





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Note: Cabinets positioned side-by-side require at least 500mm between or fitment of ventilation deflectors on exhaust side.

Dimensions

External

TRH-300-(GD/SD)

TRH-460-(GD/SD)

TRH-850-(GD/SD)

TRH-XL-(GD/SD)

WxDxH (mm)

810x950x1640

810x950x1950

1330x950x1950

1940x950x1950

Internal

WxDxH (mm)

650x650x840

650x650x1140

1170x650x1140

1780x650x1140

Clearance

TRH-300

TRH-460

TRH-850

TRH-XL

Front (mm)

810

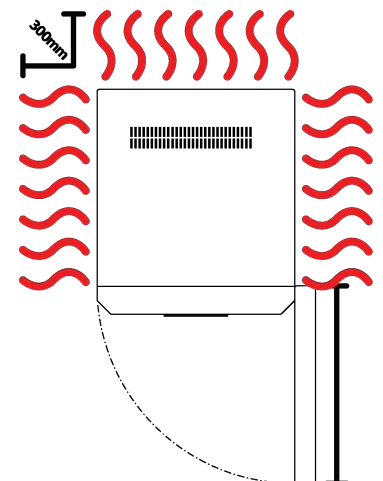
650

Back (mm)

300

Sides (mm)

300



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

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Technical Specifications	TRH-300	TRH-460	TRH-850	TRH-XL
Temperature Range	+5°C to +80°C			
Temperature Control Stability	+/- 0.2°C			
Temperature Uniformity	+/- 2.0°C			
Humidity Range	20% to 90%RH (95% with solid door) as per Control Envelope			
Humidity Uniformity	+/- 5%RH			
Heat Removal Capacity @ 10°C	600 watts		800 watts	
CO2 Range (Optional)	Ambient to 3000 PPM			
Porthole Diameter	50mm			
Electrical	15A/230V			
Nominal Capacity	300L	460L	850L	1350L
Weight	180kgs	240kgs	350kgs	440kgs
Heat Output	700 watts to 2700 watts (dependant on operating conditions)			
Noise Level @ 1 metre (dbA)	59			
Refrigerant Type	R507			

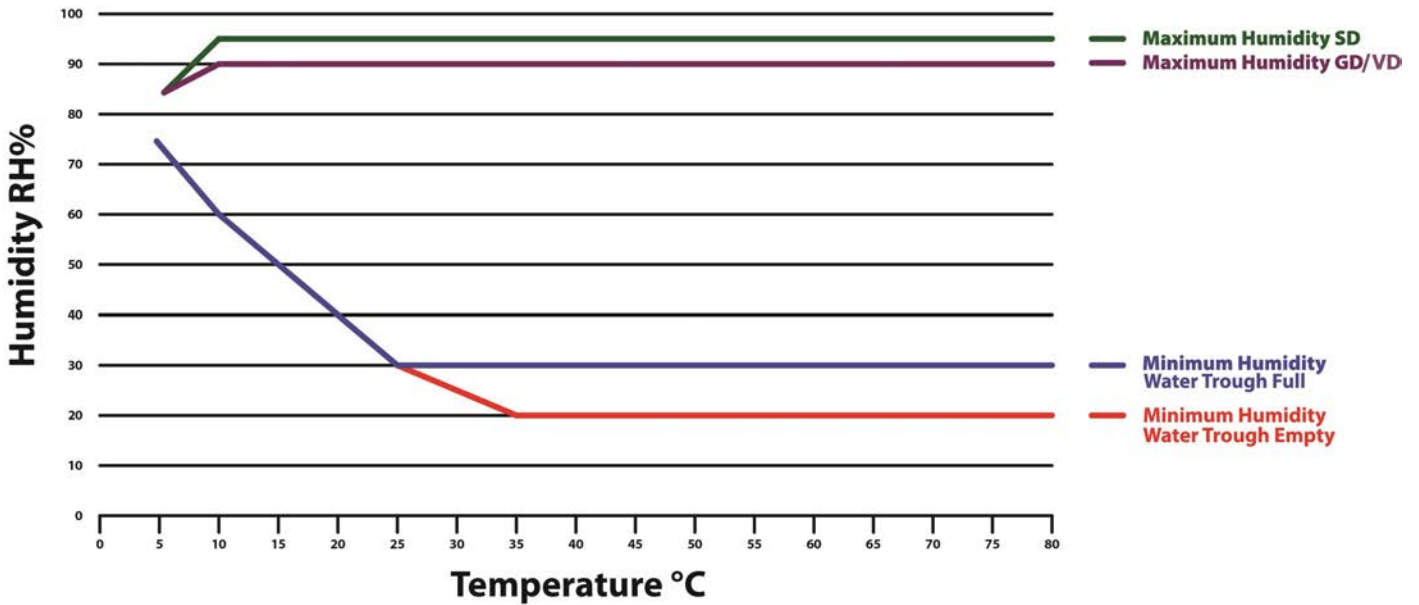


See our Door Lighting range!
460L and 850L

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Control Envelope for TRH Glass Door (GD) , Viewing Door (VD) and Solid Door (SD) Models.



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.

Warranty

We know that quality and up-time are important to you. We're proud to offer a full 2-year warranty on all Australian Made environmental chambers so you'll have worry-free product operation into the future.





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Features	TRH-300	TRH-460	TRH-850	TRH-XL
Shelves	3	4	4 levels	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				
Glass, Viewing or Solid Doors	Nomenclature designations: Glass Door (GD), Viewing Door (VD), Solid Door (SD)			
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)			
Door Locks	Door latches can be replaced with key lockable versions			
55L Pump Water Feed Tank	Pump feed water supply where mains water is unavailable			
Drain Pump	Drain Pump for when a suitable drain is unavailable			
CO2 Control	Set Point Control of CO2 Between Ambient and 3000ppm			
Additional Portholes	Additional 50mm port holes can be added to the side walls			
Stainless Steel Exterior	Stainless steel exterior option available			
LED Lighting	See TRHDL (door lighting) / TRHSL (shelf lighting) models			



We are proudly Australian owned

We will continue to invest in Australian
manufacturing.

