



Humiditherm[®]

By Thermoline Scientific

REFRIGERATED TEMPERATURE AND HUMIDITY CABINETS



(+5°C TO +80°C) (10% TO 95% RH)

Image: TRH-850-SD



- Australian Made
- Models available from 460 to 850 litres
- Precise control of temperature and humidity
- STAR 700 user friendly 7" colour touch screen
- Quiet running CFC free refrigeration system
- Fully insulated to help maintain temperature values
- Humidity control via in built dew point water trough
- Monitoring or cable point access port
- Fully adjustable heavy duty stainless steel open wire shelves
- Fitted with castors to allow for easy moving

Image right: Shown with heavy duty shelving



Product Features

The TRH series manufactured by Thermoline offer accurate and precise control of temperature and humidity.

These models have the ability to perform heating, cooling, humidification and dehumidification functions. This range is available in two standard capacities from 460 litres to 850 litres.

These models have a standard temperature range of +5°C to +80°C and up to 800watts of heat removal capacity.

Thermoline also has the ability to customise each unit to meet unique applications. Solid and glass door options are available for all models.

Features

Fan forced conditioned air supply for precise internal conditions

Temporal stability at set point at $\pm 0.2^{\circ}\text{C}$ and 1%RH (unloaded chamber)

Spatial accuracy measured to be better than $\pm 2^{\circ}\text{C}$ and $\pm 5\% \text{RH}$ (unloaded chamber)

Dehumidification via purpose built refrigeration system

Heating and humidification provided through electric heating element

Cooling provided via evaporator coils with in air handling system

50mm monitoring or cable access port (additional ports available)

Convenient manual or log book holder on side of cabinet

Easy installation with optional gravity feed water tank

Glass or solid door options



Image: TRH-460-GD
With heavy duty shelving.



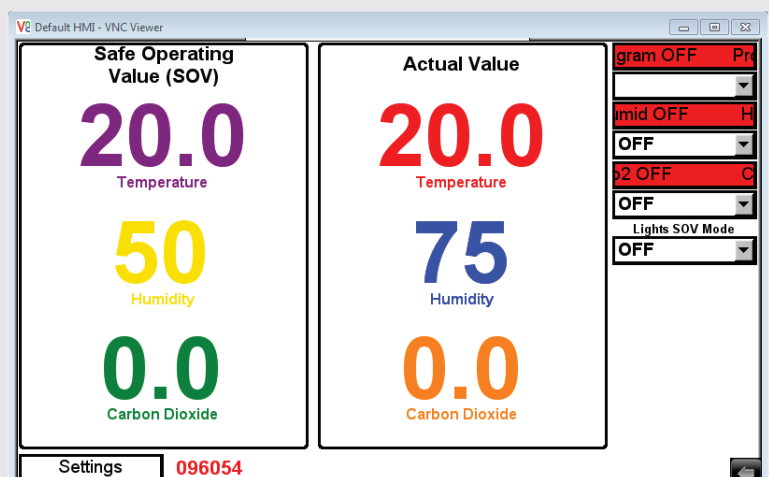
STAR 700 Controller

Humiditherm cabinets are powered by Thermoline's **Select Touch And Run (STAR 700)** touch pad control system. The STAR 700 touch pad control system offers easy to program diurnal control of temperature, lighting, humidity and carbon dioxide.

The STAR 700 features a large 154x87mm rugged full colour touchscreen, PC connectivity via ethernet cable and synchronize programmed settings which can be viewed in real time.

The STAR 700 logs the performance of the cabinets for up to up to 800 days.

A live trend screen to allow the operator to quickly check the performance conditions within the cabinet. Alternatively the operator can download the logged data to a USB and then view data via a Excel spread sheet.



Safety Features

Over current protection

Auto over temperature safety (Failsafe)

Built in electric element safety cut out

Lockable castors

Water trough with automatic water level detection and low water safety cut out

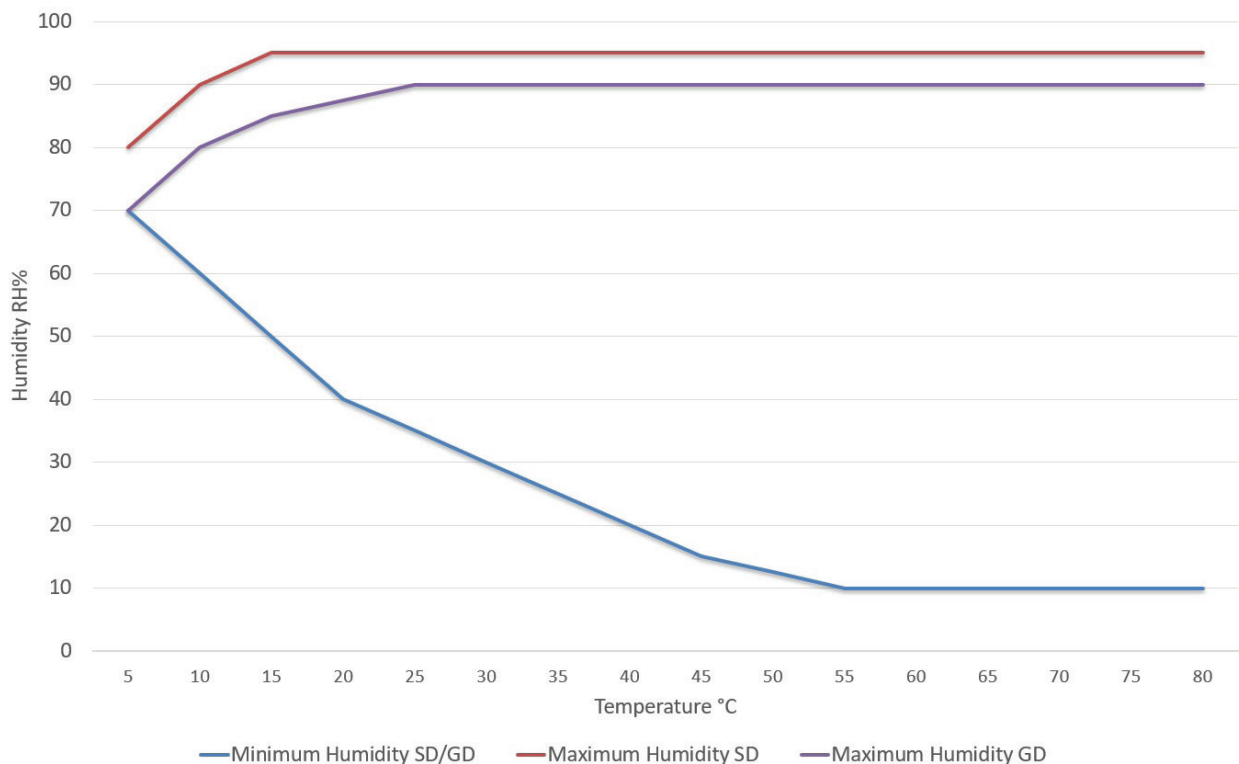
Optional Accessories

Available with solid or glass doors

Retransmission of process variables

Additional cable port entry holes

Control Envelope for 460 and 850 Litre Cabinets



Model	TRH-460	TRH-850
Temperature Range	+5°C to +80°C	
Temperature Control Stability	±0.2°C	
Temperature Spatial Variation	±2.0°C	
Humidity Range	10% to 90% (95% with Solid Door)	
Humidity Control Stability	±2% RH	
Humidity Spatial Variation	±5% RH	
Internal Dimensions (WxDxH mm)	650x650x1140	1170x650x1140
External Dimensions (WxDxH mm)	820x950x2030	1340x950x2030
Capacity (litres)	460	850
Shelf Positions	Multiple	
Shelves Supplied	4	4 Levels
Electrical Supply	15Amps / 240V	
Heat Removal Capacity at 10°C	600	800
Approx Weight (kg)	320	400

LARGE REFRIGERATED TEMPERATURE AND HUMIDITY CABINET



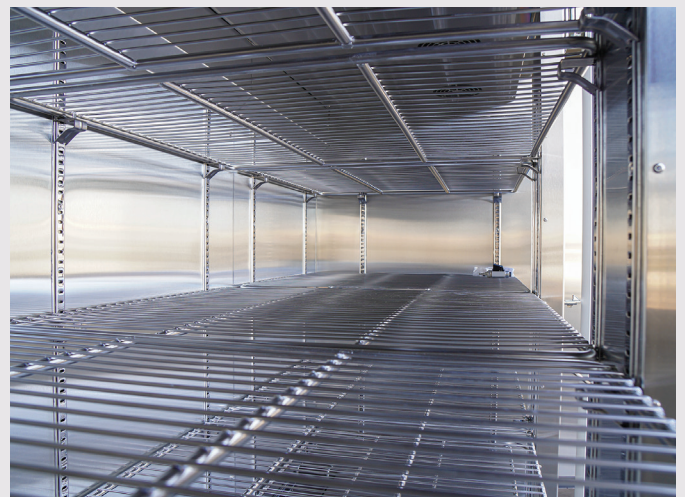
(+10°C TO +80°C) (20% TO 90% RH)

Image: TRH-XL



Large Capacity Refrigerated Temperature and Humidity Cabinet

- Australian Made
- Precise control of temperature and humidity
- STAR700 user friendly 7" colour touch screen
- Quiet running CFC free refrigeration system
- Fully insulated to help maintain temperature values
- Humidity control via steam generator
- Monitoring or cable point access hole
- Fully adjustable heavy duty stainless steel open wire shelves
- Fitted with castors to allow for easy moving





Thermoline's large capacity Temperature and Humidity cabinet differs from the standard TRH-Series being designed for the long-term storage of samples where high volume capacity is needed along with precise control of all parameters.

These large capacity models are hand crafted in Australia by our in-house engineers.

Features

Precise temperature control between 5°C and 80°C and humidity control between 20% to 90% RH

Glass or solid doors

Fan forced air supply via long life self cooling motors delivers conditioned air throughout for precise internal conditions

Temporal stability at set point better than $\pm 0.2^\circ\text{C}$ and 1%RH (unloaded chamber)

Spatial accuracy measured to be better than $\pm 2^\circ\text{C}$ and $\pm 5\%$ RH (unloaded chamber)

Dehumidification via purpose built refrigeration system with air cooled condenser

Heating and humidification provided through electric stainless steel heating element

Cooling provided via evaporator coils with in air handling system

High grade electronic temperature and humidity sensor

50mm Monitoring or cable port access point (additional ports available)

Convenient manual or log book holder on side of cabinet

Easy installation with optional gravity feed water tank

Safety Features

Over current protection

Auto over temperature safety (Failsafe)

Built in electric element safety cut out

Lockable castors

Water trough with automatic water level detection and low water safety cut out

Optional Accessories

Retransmission of process variables

Additional cable port entry holes

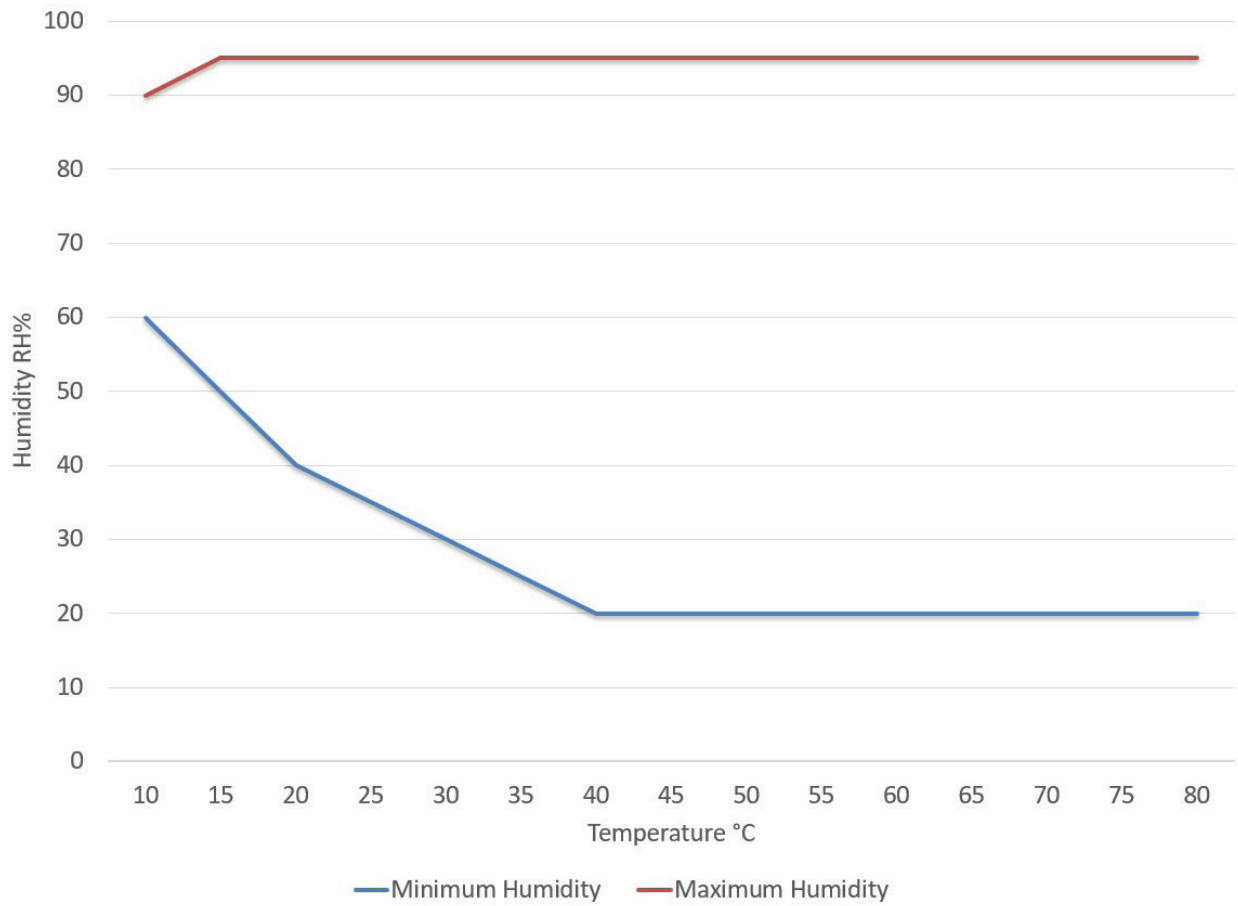
CO2 Control (0-5% or Ambient to 3000ppm) Note: Limits temperature to $+60^\circ\text{C}$

Industries

Thermoline Scientific has become the first point of contact in various industries for being able to provide solutions for all temperature and humidity controlled environments. Our experienced team is able to manufacture chambers to suit most temperature and humidity ranges, chamber sizes and space requirements.

Thermoline's broad ability range means that our TRH cabinets are currently being used in medical, agriculture, defence, pharmaceutical and research industries Australia wide.

Control Envelope for TRH-XL Cabinets



Model	TRH-XL
Temperature Range	+10°C to +80°C
Humidity Range	20% to 90%
Heat Removal Capacity at 10°C	800W
Internal Dimensions (WxDxH mm)	1780x650x1140
External Dimensions (WxDxH mm)	2160x950x2030
Capacity (litres)	1565
Doors	3 x glass or solid doors
Shelf Positions	Multiple
Shelves Supplied	4 Levels
Electrical Supply	15 Amps / 240 V
Temperature Control Stability	±0.2°C
Temperature Spatial Variation	±2.0°C
Humidity Control Stability	±2% RH
Humidity Spatial Variation	±5% RH
Approx Weight (kg)	650

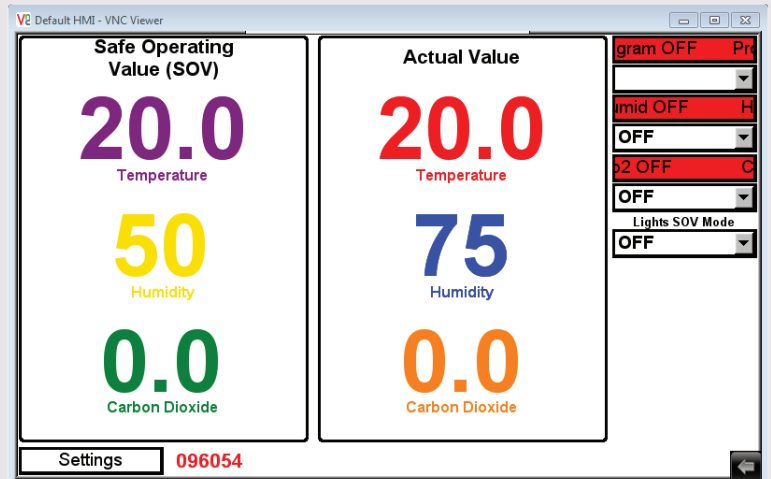
STAR 700 Controller

Humiditherm cabinets are powered by Thermoline's **Select Touch And Run (STAR 700)** touch pad control system. The STAR 700 touch pad control system offers easy to program diurnal control of temperature, lighting, humidity and carbon dioxide.

The STAR 700 features a large 154x87mm rugged full colour touchscreen, PC connectivity via ethernet cable and synchronize programmed settings which can be viewed in real time.

The STAR 700 logs the performance of the cabinets for up to 800 days.

A live trend screen to allow the operator to quickly check the performance conditions within the cabinet. Alternatively the operator can download the logged data to a USB and then view data via a Excel spread sheet.



Water Feed Tank for Humidity Controlled Cabinets

Suitable for the following models: **TRH-150, TRH-460, TRH-850, TRH-XLS/XLT**

This 55 litre water feed tank allows water to be pumped directly to the cabinet whilst being safely stored on the floor. This specialised tank features a self-priming 12v diaphragm pump, low water protective cut-out, extra-long 6 metre hose and a large opening for easy filling.

Features

- 55 Litre UV stabilised polytuff tank
- Self-priming 12v diaphragm pump
- 2.6L/min open flow, 50psi
- Low water protective cut-out with audible alarm
- Extra-large filter requires less cleaning
- Large opening for easy filling
- Large outlet for quick drainage
- Extra-long 6 metre hose



Tank Model: 55L-WC-PUMP

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, with our equipment being used in small and large Hospitals, Universities and Research Laboratories across Australia and the Asia Pacific region.

We're proud to say that we are 100% Australian owned and operated.

Head Office Phone (02) 9604 3911

Head Office Fax (02) 9725 1706

Email hello@thermoline.com.au

Web www.thermoline.com.au





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, with our equipment being used in small and large Hospitals, Universities and Research Laboratories across Australia and the Asia Pacific region.

We're proud to say that we are 100% Australian owned and operated.