

ENVIROTHERM "S" SERIES

(-40°C TO +100°C & 20% TO 90% RH)

Image: TEC-430



Test Chambers, Envirotherm "S" Series

- Available from 220 litres to 3200 litres capacity
- Accelerated testing of products in an easy to use, reach in chamber
- Stainless steel internal construction
- Pulse on and off stainless steel heating elements
- Internal humidity generator
- 50mm diameter cable port through side wall
- Programmable controllers with multiple program / cycle storage
- Digital high and low temperature alarms
- High density rockwool and polystyrene insulation used to help reduce temperature loss

Head Office Phone (02) 9604 3911
Head Office Fax (02) 9725 1706

Email info@thermoline.com.au
Web www.thermoline.com.au

 **Thermoline**
S C I E N T I F I C
H I G H E R S T A N D A R D S I N S C I E N C E

PRODUCT DETAILS

The Thermoline Series of Environmental Chambers offers accelerated testing of your products in an easy to use, reach in chamber. Over the last 30 years Thermoline have developed these environmental chambers to be user friendly while embracing modern technology in engineering concepts, refrigeration, programming, software, and electronic control to offer you exceptional performance and reliability.

Within the environmental chamber, you will find advanced design with stainless steel internal construction, dynamic refrigeration by use of regulating valves that allow cooling or dehumidification according to demand and heat control via pulsed stainless steel electric heating elements, internal humidity generator system that requires less water while actively achieving faster response times. Standard capacities available from 220 litres to 3200 litres configuration. Thermoline Scientific can also custom build chambers to meet your requirements.

TEC Features
Internal Finish: Temperature only chambers have 304 grade stainless steel, whilst humidity chambers have 316 grade stainless steel, corrosion resistant interiors with all seams fully welded.
Standard Capacities: The Envirotherm chambers are available in 220, 430, 960, 2 000 and 3 200 litre capacities.
External Finish: 'Versiclad' PVC coated steel, for high resistance to mechanical and chemical degradation.
Insulation: Composites of high density rockwool and polystyrene foams.
Access Door: Single side opening, with positive mechanical latch and extruded silicone gasket seal.
Cable Port: All chambers have a 50mm diameter cable port through the side wall.
Internal Visibility: A multi-glazed viewing window in main access door with a shrouded fluorescent lamp for internal illumination is fitted as standard to temperature & humidity chambers. Humidity chambers also have an internal window wiper as standard.
Refrigeration: Envirotherm chambers use refrigerants which conform to the latest environmental protocols. Systems are fitted with a full complement of electrical, pressure and temperature protection devices and are designed to operate in ambient temperatures up to 32°C. Smaller chambers have integral air cooled refrigeration but in the larger/higher performance chambers optional remote air cooled or water cooled systems are available.
Heating: Heating elements are corrosion resistant, sheathed resistance type (not open wire type).
Safety Controls: Independent, operator settable, digital high & low temperature controls are fitted to all chambers.
Controllers: Chambers are all fitted with a microprocessor programmer/controller with multiple program/cycle storage and computer interface. Graphical software for operation, monitoring and logging by an external PC is provided as standard. (PC not provided)
Humidity Sensing: High grade, temperature compensated humidity transmitter and a Pt100 sensor for temperature.
Control Technique: All microprocessor controllers use a three term (PID), dual (heat/cool) output, control algorithm to minimise power consumption and increase operating flexibility.
Temperature Range: Standard range is between -40°C and +100°C. (Maximum Ambient 32°C)
Excursion Rates: Temperature Excursion Rates are variable and dependant upon temperature ranges.
Humidity: Standard range 20% to 95% RH (temperature dependant). Low humidity values are based on a dew point temperature of +2°C.

SPECIFICATIONS

See following page.

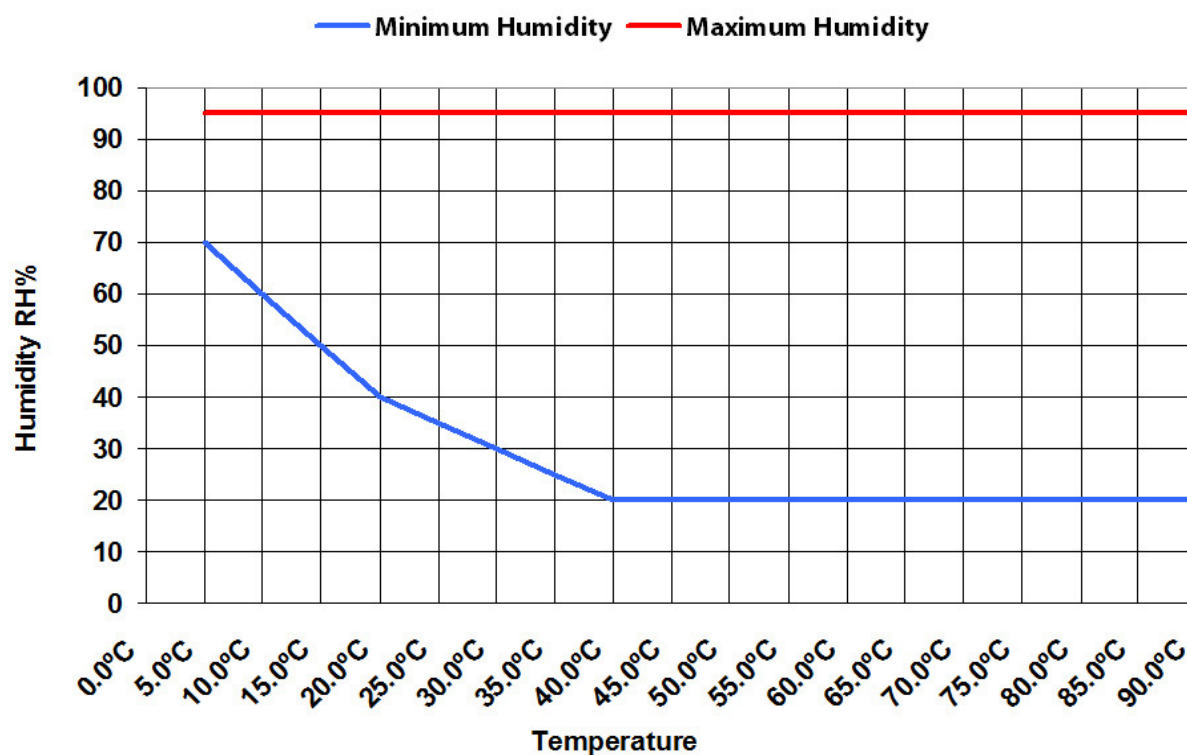
Head Office Phone (02) 9604 3911
Head Office Fax (02) 9725 1706

Email info@thermoline.com.au
Web www.thermoline.com.au

SPECIFICATIONS

Model Temp. & Humid	Model Temp. Only	Internal Dimensions (HxWxD mm)	Capacity (Litres)	Temperature Range
TEC-220-TH	TEC-220-TO	800x550x500	220	-40°C to +100°C
TEC-430-TH	TEC-430-TO	800x900x600	430	
TEC-960-TH	TEC-960-TO	980x980x1010	960	
TEC-2000-TH	TEC-2000-TO	1800x980x1150	2000	
TEC-3200-TH	TEC-3200-TO	1800x980x1810	3200	

Temperature & Humidity Performance Curves for Thermoline 'ENVIROTHERM' Chambers with Dew Point Trough Humidification.



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 info@thermoline.com.au

Web www.thermoline.com.au