CLIMATIC CYCLIC TEST CHAMBER

The Design Brief

- Leading-edge technology
- Service-proven, maintenance-friendly
- Highest possible quality, reliability and durability
- Economical to run, environmentally friendly



Internal Volume	Internal Dimensions	Temperature Range	Humidity Range
125Ltrs	500X500X500mm	-65°C to +180°C	20% to 95% RH
210Ltrs	600X600X600mm	-65°C to +180°C	20% to 95% RH
350Ltrs	700X700X700mm	-65°C to +180°C	20% to 95% RH
425Ltrs	800X800X800mm	-65°C to +180°C	20% to 95% RH
750Ltrs	900X900X900mm	-65°C to +180°C	20% to 95% RH
1000Ltrs	1000X1000X1000mm	-65°C to +180°C	20% to 95% RH
1350Ltrs	1100X1100X1100mm	-65°C to +180°C	20% to 95% RH
1800Ltrs	1200X1200X1200mm	-65°C to +180°C	20% to 95% RH
Custom Size, Temperature, Humidity Range Available			

Performance

Temperature

Control Accuracy: with in +/- 0.5°C

Gradient Accuracy: +/- 1°C

Average Ramp Rate : 2°C to 8°C / minute

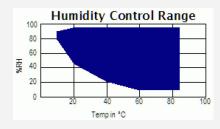
between 150 °C & -40 °C

Performance

Humidity

Humidity Control: +/- 2% RH,

Dew Point 5°C



ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Phone: 9841025507 Email: <u>ultrathermoscientific@gmail.com</u>; <u>thermo@yours.com</u> TNGST 0962538/03-04; CST 770373 dt. 17.9.03

Standard Facility

Rotronics Humidity Probe for Direct

RH Measurement

Access Port with Silicone Plug

5 Pane Viewing Window Sample Viewing Light

SS 304 Loading Tray

Drain for Condensate

Strip heaters for Door and Window

Auto-refill of DM Water DM Water Level Controller

Emergency Stop Door Interlock

Single Phase Preventer

RS232C interface with PC Software

All possible alarms & interlock

Low and High Temperature cutoff

Others

Air / Water Cooled Cascaded Refrigeration System with CFC Free refrigerant Factory Calibration Certificate traceable to NABL

16 SWG MS Powder Coated Exterior

16SWG SS304 Interior with Full TIG Welding



- All the electrical items used will be of standard IP grade suitable for Humidity chamber
- All the switch gears and MCB's used in the construction shall be of high quality reputed brands. (Schneider Electric)



DWM Copeland Condenser













ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Phone: 9841025507 Email: <u>ultrathermoscientific@gmail.com</u>; <u>thermo@yours.com</u>

TNGST 0962538/03-04; CST 770373 dt. 17.9.03

Danfos Refrigeration Accessories







Direct Measurement Humidity Probe from Rotronics AG

Rotronics Model XB20 Dual Temperature & Humidity Sensor with Latest Air Chip Digital Technology



Humidity Measurement Sensor Type : Rotronics

Hygromer

Temperature Meaurement : PT 100 RTD Humidity Measuring Range : 0 to 100% RH

Accuracy: +/- 1% RH

Temperature Measuring Range: -100degC to

+200degC

Operating Limits at Electronics: -40degC to

+85degC

Probe cable length: more than 2 mtrs.

Manufacturer: Rotronics, USA

IMPROVED PERFORMANCE IN ENVIRONMENTAL CHAMBERS, INCUBATORS AND DRYERS

- Relative humidity and temperature measurement
- Outstanding accuracy and repeatability
- · Wide choice of probes to satisfy every application
- · Various analog outputs available
- · Freely scalable analog signals
- Simulator mode
- Automatic humidity sensor test and drift compensation
- Pt100 RTD direct 4-wire connection option available
- · 2.000 point data recording

ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Phone: 9841025507 Email: <u>ultrathermoscientific@gmail.com</u>; <u>thermo@yours.com</u> TNGST 0962538/03-04: CST 770373 dt. 17.9.03

Advantages

Systems designed to work at 35°C Ambient. No Air Conditioning is required for full performance

Direct Sales and Service Support from the Manufacturer. The Equipment will be designed, manufactured and proved to your requirement. Full and immediate technical support will be available directly from the manufacturer

Spares will be available off-the-shelf and the equipment can be brought back to working condition even at the worst breakdown scenario with in 3-5 working days.

Can be made to order. Can be custom made to meet all the specifications.

Factory will be directly involved in the installation and support of the supplied systems.



Heat / Cold / Constant Climates / Alternating Temperatures / Alternating Climate

IEC 60068, IEC 60721-4, DIN40046, part 3, DIN 72300-4, DIN 40046 MIL-STD-810, MIL-E-5272, MIL-STD-202 MIL-STD-331

ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Phone: 9841025507 Email: <u>ultrathermoscientific@gmail.com</u>; <u>thermo@yours.com</u> TNGST 0962538/03-04; CST 770373 dt. 17.9.03

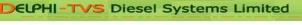
OUR CLIENTS







































ممممم

00000



NOKIA trafag

Connecting People

Sony Ericsson

Indrad Auto Components (A Division of Lucas - TVS Limited)



























BorgWarner Thermal Systems







ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059 Phone: 9841025507 Email: ultrathermoscientific@gmail.com; thermo@yours.com TNGST 0962538/03-04; CST 770373 dt. 17.9.03