Temptronic

ECO-810-M THERMOSTREAM®
with WhisperStream quiet technology

-80° to +225°C

The ECO Series is designed for any environment where audible noise and heat dissipation are concerns. It operates on an energy-efficient, 20 amp, 60Hz circuit with proprietary technology delivering quiet, smooth sounding operation. Additionally, the system **does not require annual leak testing** because its gas charge is below the CO_2 equivalent limit for greenhouse gas emissions as specified by Regulation EU 517/2014.

These fast, precise temperature forcing systems provide effective testing and conditioning of electronic components, boards and modules. Built with proven ThermoStream reliability and supported worldwide.

PERFORMANCE:
Temperature Range*
  -80 to +225°C (60Hz)
  No LN_2 or LCO_2 Required
Transition Rate*
  -55 to +125°C, approx. 10 seconds
  125 to -55°C, approx. 10 seconds
System Airflow Output*
  4 to 18scfm (1.9 to 8.5 l/s) Continuous

*under nominal operating conditions
ultimate high & low temperatures (±1°) achieved at 12scfm

TEMPERATURE CONTROL:
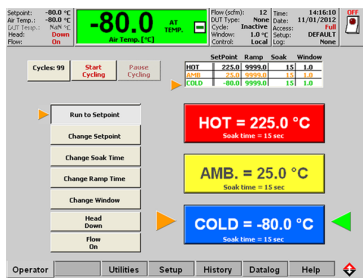Temperature Display & Resolution
  +/- 0.1°C
Temperature Accuracy
  1.0°C (when calibrated against NIST standard)
DUT Temperature Control
  Proprietary control algorithm enables DUT
  temperature to be directly controlled
DUT Sensor Ports
  Internal diode, thermocouples (T & K),
  RTD (100 Ohm platinum)

OPERATOR SCREEN

DATALOG SCREEN

FEATURES:
ECO Friendly: **No Annual Leak Testing Required** per F-Gas Regulation EU 517/2014
  • **20 Amp Operation:** Full performance with 20 amp service
  • **Automatic Power Reduction:** Reduces power usage during idle periods
  • **Heat Only Mode:** Reduces power usage when cold temperatures are not used
WhisperStream Technology: quieter, smooth-sounding operation, 56 dBA
Frost Free Test Environment: dry air purge for tester interface, prevents condensation: 0.5 to 3scfm (0.25 to 1.5 l/s)
Heated Defrost: quickly removes moisture buildup from internal chiller

  • Fully adjustable thermal head
  • Windows® OS
  • Local & remote operations
  • On-screen help
  • LabView™ & LabWindows® drivers
  • Ethernet, IEEE-488, RS232 ports
  • USB, mouse, keyboard ports
  • Customizable & savable test setups
  • Program & datalog storage, export via Ethernet or USB
  • User defined temperature limits
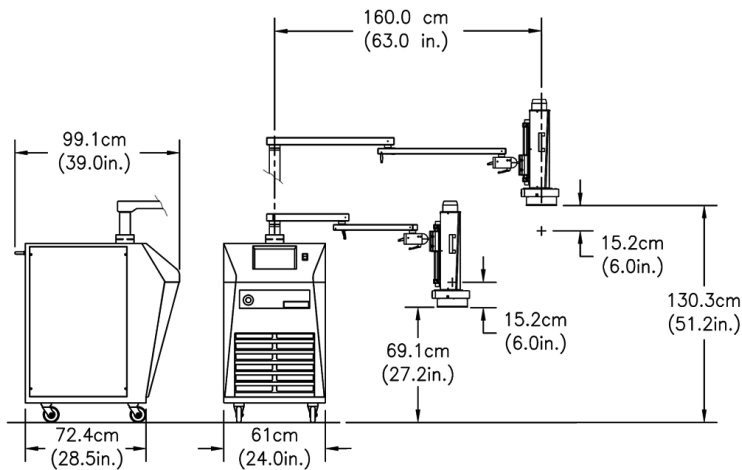
APPLICATION OPTIONS:
Thermal Cap or FlexExtender Hose
  4.5 or 5.5 inch ID Thermal Cap or optional FlexExtender Hose for connection to external Thermal Chambers or enclosures
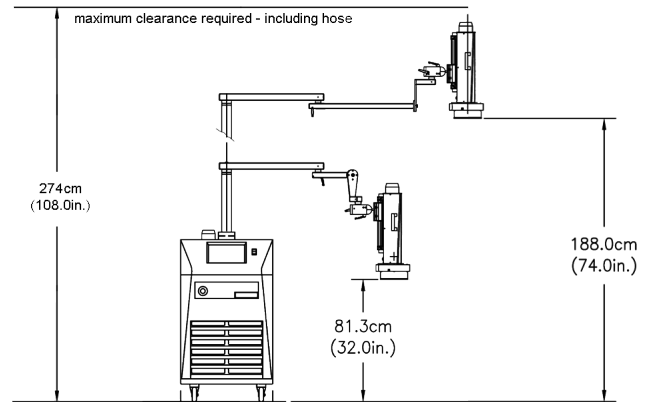MobileTemp™ Thermal Chambers
  Temperature Chambers designed specifically for use with ThermoStream systems. See Additional Datasheets for details.

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SYSTEM DIMENSIONS
STANDARD

SYSTEM DIMENSIONS
EXTENDED HEIGHT

FACILITY REQUIREMENTS

Power[1]	200 - 250 VAC, 60Hz, 20 amp, 1phase
Compressed Air[2]	Clean Dry Air (CDA), filtered to 5 micron particulate contamination. Oil Content: <0.1 ppm, by weight, filtered to 0.01 micron oil contaminant. Dewpoint: <10°C @ 6.2 BAR (90PSI)
Air Supply Pressure	6.2 to 7.6 BAR (90 to 110 PSIG)
Total Air Flow Rate Required	7.1 to 14.2 l/s (15-30 scfm), 11.8 l/s (25 scfm) nominal
Air Supply Temperature	+20° to +25°C; +22°C nominal
Operating Environment[2]	+20° to +28°C; +23°C nominal
Humidity	0 to 60%; 45% nominal

WEIGHTS & DIMENSIONS

Base[3]	Width: 61.0 cm (24 in.), Depth: 72.4 cm (28.5 in.), Height: 108 cm (42.5 in.)
System Weight	Not packed: 236 kg (520 lbs.) Packed: 365 kg (805 lbs.)
Mobility	Four static dissipative, swivel caster wheels
Maximum Reach	160.0cm (63 in.)
Maximum Operating Height	130.3 cm (51.2 in.) Extended height option: 188.0 (74.0 in.)
Minimum Operating Height	69.1 cm (27.2 in.) Extended height option: 81.3 (32.0 in.)
Noise Level	<56 dBA

SERVICE & SAFETY

Refrigerants	HCFC and CFC-free, non-toxic, non-flammable
Serviceability	Auto-diagnostics and field replaceable modules
Over Temperature Protection	Settable high and low air temperature limits (factory set at +230°C)
Compliance	CE, RoHS, EU 517/2014 (<10 tons CO_2eq, **no annual leak testing required**)

[1]System is configured for operation within voltages listed above using an internal transformer. Please specify power configuration with order
[2]Under operating conditions which are greater or less than nominal, performance may be less than specification provided
[3]An additional 20.3cm (8 in.) clearance is required for supply connections and cabinet ventilation

ISO REGISTERED ITAR