MOBILETEMP™ Series

DATASHEET AND SPECIFICATIONS

CLAMSHELL STYLE THERMOCHAMBER™

The Clamshell Style THERMOCHAMBER™ is a compact, extremely portable, chamber that is ideal for bringing components, assemblies, and other parts to temperature directly at the test site.

Key Benefits

▶ Portable

▶ No LN$_2$ or LCO$_2$ required

▶ Frost-free low temperature testing

▶ Uniform, accurate, controlled thermal environment

MOBILETEMP™ system configured with Clamshell style THERMOCHAMBER™ & THERMOSTREAM® temperature source

Bring Temperature to your Test with MOBILETEMP™!

For the most efficient thermal testing and cycling of Devices Under Test (DUTs), samples, and components, use the Clamshell Style THERMOCHAMBER™ combined with a THERMOSTREAM® temperature forcing system to create a precise and portable temperature testing system.
THERMOCHAMBERS™ are available in a variety of styles and sizes and they can be used interchangeably with THERMOSTREAM® temperature sources to provide a modular and flexible range of MOBILETEMP™ systems.

FEATURES AND ADVANTAGES

▶ -60°C to +175°C Temperature Range (some configurations up to +200°C)

▶ Easy top load access for adding and removing DUTs

▶ Fastest available temperature transition rates:

    Heating Time, ambient to +125°C: 4.4 minutes*

    Cooling Time, ambient to -55°C: 14.4 minutes*

    *transition rates achieved under nominal conditions with 18scfm air flow
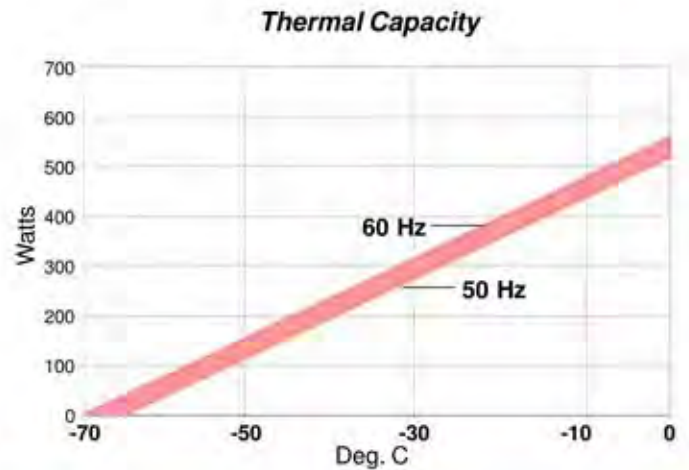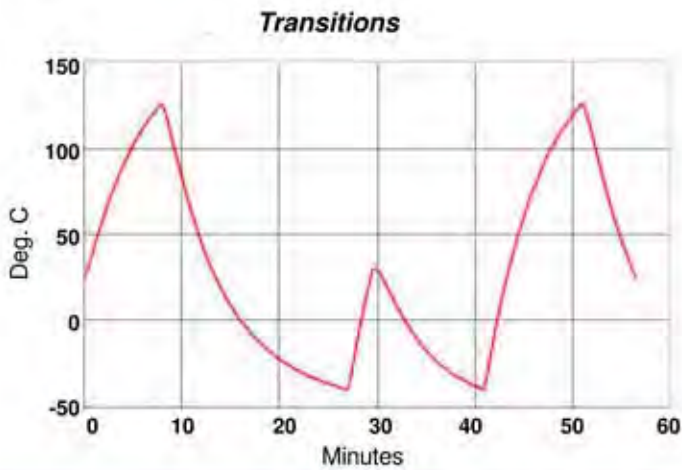
With the top loading Clamshell style THERMOCHAMBER™, adding or changing DUTs or cables is quick and convenient

▶ FLEXEXTENDER™ Hose allows the THERMOCHAMBER™ to be placed directly at the test site

▶ Patented **Linear Cable Feedthrough Ports** on four sides

▶ Air purge at cable feedthrough maintains a **moisture-free environment** by preventing frost build up

▶ Chamber closure can be verified via integral Proximity Switch

▶ Removable, Non-Conductive Support Platform inside the Chamber holds the DUT and is easily modified

The FLEXEXTENDER™ air hose easily connects the THERMOSTREAM® air supply to the right or left side of the THERMOCHAMBER™

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ISO 9001 Certified   www.inTESTthermal.com   part number: SL10510E

Transitions

Thermal Capacity

Performance and Features

Temperature Change Rate* (in minutes)

Ambient to +125°C: 7.8 | +125°C to Ambient: 6.8
Ambient to -40°C: 10.5 | -40°C to Ambient: 2.4

Chamber Uniformity*

2.0°C range from setpoint

* Refer to Temptronic Product Specification Doc. SL10590
* For optimal performance, DUT must be properly sized
* Performanc is measured using THERMOSTREAM® temperature
   source at 12scfm flow rate

Features

▶ Linear Cable Feedthrough Ports
  - Cable pass through ports on each side of the chamber, designed to accomodate multiple cables laid side by side. Max. recommended cable outer diameter is 1.3cm (0.5in). Each cable port is 14.6cm (5.75in) long.

▶ Thermocouple Connections
  - (4) T-type thermocouple connections with chamber interior and exterior connection ports

▶ Cable Feedthrough Air Purge
  - Dry air purge surrounding cable feedthrough ports to minimize moisture and frost

▶ Proximity Switch
  - Sensor to monitor the opening and closing of the chamber

▶ Removable, Non-Conductive Support Platform

▶ FLEXEXTENDER™ Air Hoses
  - choose a 2', 4', or 6' standard length hose with system. Additional sizes and hoses available

CABLE FEEDTHROUGH PORTS
THERMOCOUPLE PORTS
PROXIMITY SWITCH
EXHAUST PORT
AIR PURGE

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Weights and Dimensions

Inside Dimensions
35 X 41 X 11 (±0.3cm)
(14.0 X 16.0 X 4.5 ± 1/8 in.)

Outside Dimensions*
46 X 51 X 26 (±0.3cm)
(18.0 X 20.0 X 10.3 ± 1/8 in.
*height includes exterior rubber feet with height of 1.27cm (0.5in)

Chamber Weight
13.4 Kg
29.5 lbs.

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ISO 9001 Certified

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