

**Name : Thermostream**

**Model: TP04300A**

**Brand : Temptronic**

**Advantage :** tpo4300 and tpo4310 has wide range of temperature, from  $-80^{\circ}\text{C}$  ~  $+225^{\circ}\text{C}$ ; control temperature accurately, minimal temperature display is  $0.1^{\circ}\text{C}$ , temperature Residual is  $\pm 1^{\circ}\text{C}$ ;

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**System Performance:**

- Airflow: High capacity 9 l/s (18 scfm) continuous airflow optimizes temperature transition rate and throughput.
- Typical Temperature transition rate:
  - $55^{\circ}$  to  $+125^{\circ}$  C: approximately 7 seconds
  - $+125^{\circ}$  to  $-55^{\circ}$  C: approximately 20 seconds
- Temperature Control: Air or Patented DUT Dual Loop directly at the DUT case to  $\pm 0.1^{\circ}$  C
- DUT Sensor Ports: Four: Internal Diode, Type T or Type K thermocouple, and 100 ohm RTD
- Temperature set, display and resolution:  $\pm 0.1^{\circ}$  C
- Temperature Accuracy:  $1.0^{\circ}$  C ( calibrated to NIST standard)
- Remote interface ports: Four: IEEE-488, RS232C, SOT/EOT/SFF, Ethernet.

*\*Note 1: Due to the use of HCFC-free refrigerants with 50 Hz systems, the ultimate low temperature capacity of 50 Hz systems will be up to 5&C warmer than 60 Hz systems.*



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**Operating Features:**

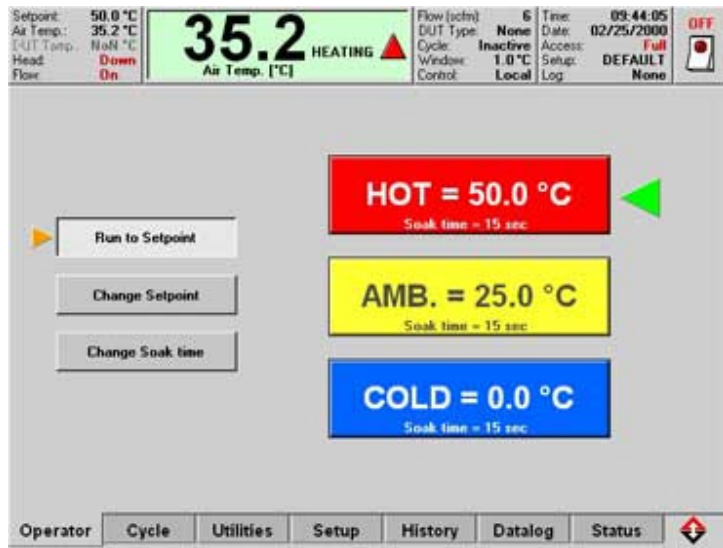
- User Control at Color Touch-screen at front panel or via remote interface
- Two modes of operation:
- Operator Mode: Test and cycle at Hot/Ambient/Cold temperatures

- Cycling Mode: Utilize up to 18 thermal cycling sequences, graphing, datalogging, and other advanced features.
- User-defined "At Temperature" Windows, airflow rate, Air or DUT Temperature Control
- Thermal head raising and lowering: Pneumatic control; also manually adjustable
- Arm/manipulator movement: manual locking, Rotates 330 degrees around base for positioning; extends to 139cm (55 in.)
- Thermal Cycling Sequences: Set up to 18 cycling routines in sequence on one table.
- Hard drive or diskette storage of test set-up files for quick recall and test repeatability.
- Documentation: Color graphing, Automated datalogging to hard disk and/or diskettes
- Peripheral ports for user-supplied printer, monitor, keyboard, and mouse
- CFC-free for all systems; HCFC-free for all 50 Hz Systems
- CE Approved and SEMI S2-93A compliant



#### Applications:

- Test and cycle a DUT under a variety of conditions, creating test sets of up to 18 cycling sequences. Graphing, datalogging and printer port features assist in documentation.
- For 24 hr/ 7 day test environments, the TP04300A's high capacity airflow and DUT thermal precision ensure high throughput with consistent repeatability. Operator's Mode ensures quick set-up for testing at up to three temperatures.
- Thermal source for applications requiring precisely controlled thermal air, including the ThermoFixture® enclosure/ATE interface for thermally testing PCB, modules, assemblies, digital, high frequency (RF, microwave), and high power devices.



#### Options & Accessories

##### Custom Thermal Test Enclosure (CTTE)

Custom Thermal Test Enclosures provide a frost-free environment for testing components, modules, small subassemblies, printed circuit boards and MCMs over the full -80° to +225° C temperature range. Patented probe-through windows permit the probing of the PCB or subassembly while it is held at precise temperature in the CTTE thermal environment, from -55° C to +125° C.