



FlexTC - Laboratory, Benchtop Temp. Forcing System

Cooling power 21W@-45°C
From -55°C to +155°C

FlexTC is high-performing, reliable, self-contained, compact, and extremely economical system. Low cost of ownership

FlexTC Thermal Forcing System stimulates DUT to the desired temperature by direct contact/conduction between a thermal head's plunger and the DUT. Soldered down or socketed DUT's are accessed through a selection of interfaces such as adapter plates, boom stands, vacuum and pneumatic systems.

Powerful stand-alone Thermal control unit, Features:

- ✓ Greatest cooling power 21W@-45°C
- ✓ Extended temperature range enable to reach easily - 40°C or less at Tj
- ✓ Fastest time to temperature ratio
- ✓ Very short stabilize soak time
- ✓ Excellent temp. stability 0.2°C
- ✓ operated by a smart controller which is accessed through a 7" color touch-screen with extensive menu
- ✓ can be remotely controlled via an Ethernet



FlexTC is a stand-alone, plug and play Unit, requires only:

- ✓ 220-240VAC, 16A, 50Hz, 1 phase wall outlet
- ✓ Clean dry air or nitrogen for condensation free operation during cold testing.

FlexTC System suits your device test at:

- ✓ Your test bench, or
- ✓ ATE in your lab. & can be seamlessly integrated in production with handlers and ATE's.
- ✓ FlexTC can also be used to test multi-site DUT's,
- ✓ Also as a thermal chuck with probe station.
- ✓

FlexTC with 'Clip-On' & Z axis integrated

- ✓ Robust and small footprint
- ✓ Setup is very fast and convenient using the clip connects.
- ✓ Precise and consistent force, contact and thermal conductivity.
- ✓ Touch screen for accurate actuating force control in Kgf, (can be remote controlled)
- ✓ Fast and simple to attach and detach the thermal head



System General

Temperature Range	-55°C to +155°C
Temperature Accuracy	±0.5°C
Typical Transition Rates	25°C to -40°C in <4min 125°C to 25°C in <2min
Temperature Sensor	Tcase PT100 Thermistor K-type thermocouple Thermal-diode through ethernet port Thermal-diode through analog port Ethernet (TCP/IP)
System Indicators and Fail-safes	Thermal head over-temperature, fan operation, cooling unit operation
DUT Pressure Force	2 - 100 Kg/Force
DUT Dimensions	≥ 2 x 2 mm
DB Rating	40 dBA
MTBF	70,000 hr

Mechanical Dimensions

System Enclosure mm / inch	(L) 420mm x (W)320mm x (H)220mm (L) 16.5" x (W) 12.5" x (H) 8.5"
System Weight	22 kg
Thermal Head (mm)	80mm diameter
Thermal Head Hose	2 meter (6.5ft) standard 3 meter (10ft) max

System Requirements

Electrical	100/115/120/220/230/240 VAC ±10% 50/60 Hz, single phase, 10A max.
Purge	0.2-0.6[BAR] dry air/ dry Nitrogen
Ambient Temperature	5°C to 35°C (40°F to 95°F)
Ambient Humidity	20% to 95% RH

Features:

- Condensation FREE at cold test
- Maintenance FREE system
- Fully programmable with MATLAB, Lab VIEW, C++, VB, Linux, Python.
- Cost effective due to low cost and high performance
- Vibration FREE contact
- Magnetic field FREE contact
- PID overshooting control
- Stand-alone plug and play system
- No external chiller or compressed air is required
- Software controlled transition rates
- Suitable for testing any socketed or soldered devices
- Environmentally friendly operation
- ESD safe product
- Min and Max temperature safety lock
- Can be seamlessly integrated with handlers and ATE.

