

# Max TC G4

- ✓ High-power temperature forcing system
- ✓ High cooling power - 40°C@90W
- ✓ From -70°C to +175°C / +200°C

MaxTC Actuators: (Optional)



180 Angle head



Right angle head

MaxTC G4 is Mechanical-Device's high performance system. Designed to handle high power dissipation DUT's, by direct conduction thermal control.



**New G4**

**MaxTC's G4 thermal conduction cooling and heating system** stimulates the DUT to the desired temperature by direct contact between the thermal head plunger and the DUT. The solution is suitable for soldered components or sockets through a variety of interfaces such as adapter plates, boom stands, vacuum applications and pneumatic systems.

#### Powerful stand-alone Thermal control unit, Features:

- Great cooling power -40°C @90W
- Extended temperature ranges easily reaches -65°C or less at Tj
- Fast time to temperature ratio
- Very short soak time stabilization
- Excellent temperature stability 0.2°C
- Powered by a smart controller accessible via a 7-inch color touchscreen with an extensive menu
- Remotely controlled via an Ethernet

#### MaxTC G4 is a stand-alone, plug and play Unit, requires only:

- AC input; MaxTC: 208-240 VAC; 1~ 50Hz /60Hz 16A
- Plug type: NEMA L6-20 or 30
- Cold testing free from condensation

#### MaxTC G4 systems are suitable for testing your devices at:

- Your testing bench
- ATE's in your lab and integrates in production seamlessly with handlers
- MaxTC can also be used for testing multi-site DUT's
- Used as a probe station with a thermal chuck

#### MaxTC with a Clip-On and Z axis integrated:

- Robust and small footprint
- Setup is convenient and very fast using clip connections.
- Applies precise and consistent force contact and thermal conductivity.
- Accurate actuating force (Kgf) controlled from a touch screen or remotely
- Simple and quick connection and disconnection of the thermal head
- Adaptable for variety of soldered and socketed devices (2mm to 45mm)
- For full actuation only compressed air supply is required. (80PSI maximum, 4mm air pipe hose)
- Ideal for bench testing, ATE and productive test engineering

## System general

Temperature range	-70°C to +175/200°C
Temperature accuracy	±0.5°C
Typical transition rates	25°C to -40°C in ~<2min 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 failsafes	Thermal head over-temperature fan operation, cooling unit operation
DUT pressure force	2 - 100 Kg/Force
DUT dimensions	≥ 2 x 2 mm
DB rating	55 dBA
MTBF	70,000 hr

## Mechanical dimensions

System enclosure mm / inch	L) 610mm x (W) 505mm x (H) 365mm (L) 21.8" x (W) 17.7" x (H) 11.8"
System weight	52 Kg
Thermal head (mm)	80mm diameter
Thermal head hose	2 meter (6.5ft) standard

## System requirements

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

## Product features

- Condensation FREE at cold test
- Maintenance FREE system
- Fully programmable with MATLAB, Lab VIEW, C++, VB, Lynux, Python and others
- 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.

