

ECO COOL® & Dual Edition



-30°C to 200°C
-0°C @ 200W

Super Economical Thermal Control Unit

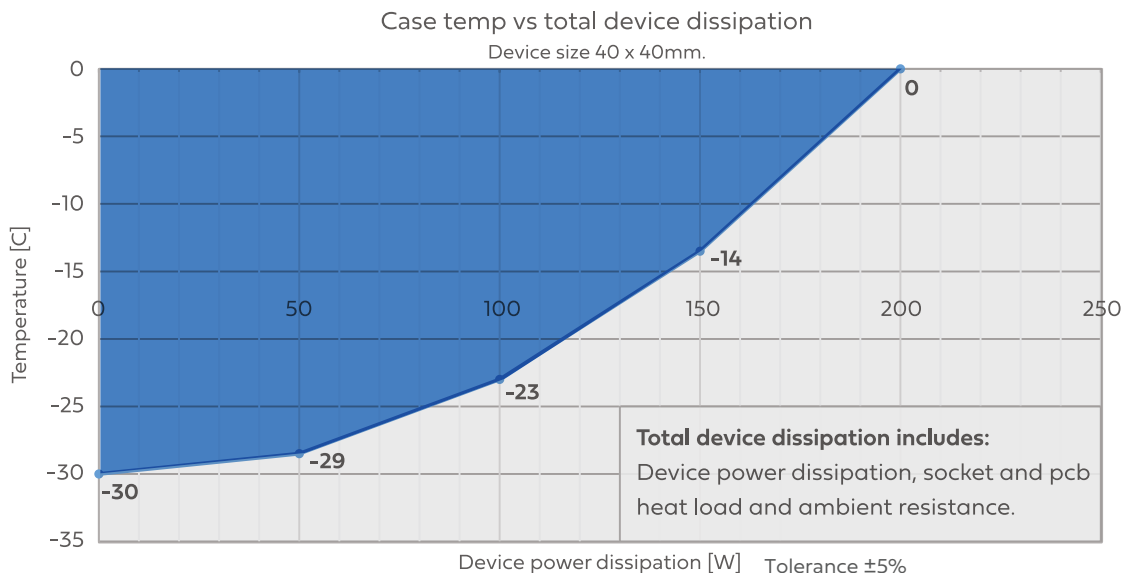
Mechanical Devices is pleased to offer its customers with the first direct phase change TCU with DUAL head. Each head can be controlled individually. This DUAL head unit makes it possible to reduce the cost per workstation, saves space, reduces power consumption and heat emission in the laboratory or production hall.

MD Thermal control units were designed with high efficiency and flexibility in mind, allowing for customization to suit different package and interface variations. The system allows for temperature forcing across a wide range of device sizes and types, whether socketed or soldered to the board. With state of the art design and technology MD units stimulate the DUT to the desired temperature precisely and consistently via direct contact with a thermal head's tip.

The well proven thermal head methodology creates a stable temperature control environment right where you need. The pneumatically driven thermal head makes direct contact with the IC device providing great power handling and precise temperature control.

The ECO COOL was designed to be an economical solution, to maintain low temperature of high power devices. It is designed to fit 19" rack cabinet 7U.





System Specifications:

Operating

Temperature range	-30°C to +200°C
Temperature accuracy	±0.2°C
Transition rates	up to 75°C/min
Temperature sensor types	PT100 thermistor Thermal diode feedback
Actuation type	Pneumatic clip-on actuator
Actuation force	up to 80 Kgf / 350 Kgf

Mechanical Data

System size (WxHxL)	450mm x 310mm x 495mm 19" rack, 7U
System weight	40 Kg
Thermal head 1 & 2 (mm)	73 x 43 x 73
Heat exchanger size (mm)	55 x 55
Controller to TH distance	~2 meter (6.5ft)

Facilities

Power	200V-240V AC 50/60Hz, 16A max
CDA	<0.5 CFM @ 0.05 -0.2MPa (0.5-Bar)
Dew point	-30°C
Operating temperature	-10°C to 30°C
Plug	Nema L6-20/30

Data Communication

Ethernet TCP/IP	RJ-45
Touch screen display	7" LCD

Features:

- Temperature range -30°C to +200°C
- Cooling power 0°C @ 200W (Tc)
- Temperature stability 0.2°C
- Each head is controlled independently
- Self-contained liquid free operation
- Quiet and portable
- Adapt to most packages and sockets
- Condensation FREE
- Maintenance FREE
- Remotely controlled via Ethernet
- Fully programmable for automation
- Tj and Tc control
- Environmentally friendly operation

Available Options:

- Clip-on actuator
- Manual actuator
- Toggle clamp
- Boom stand
- Enclosures
- Customized fixtures

Applications:

- ATE, SLT and bench
- High reliability testing
- OEM integrations
- LN2/thermal stream/
chiller replacement