

# Mug-SH

## High Power Temperature Forcing System 0-600W (-40°C at 400W)

For IC and electronics characterization, Thermal test, and failure analysis



**Direct Contact of Automated Thermal Head On DUT**

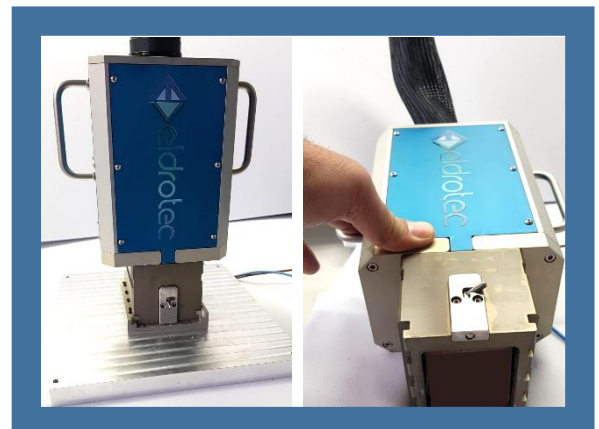
**Thermal cycling of DUT: from -75°C to +170°C (±1°C)**

**Power range: 0-600W**

**DUT 25X25 to 70X70, T-CASE: -40°C @ 400W**

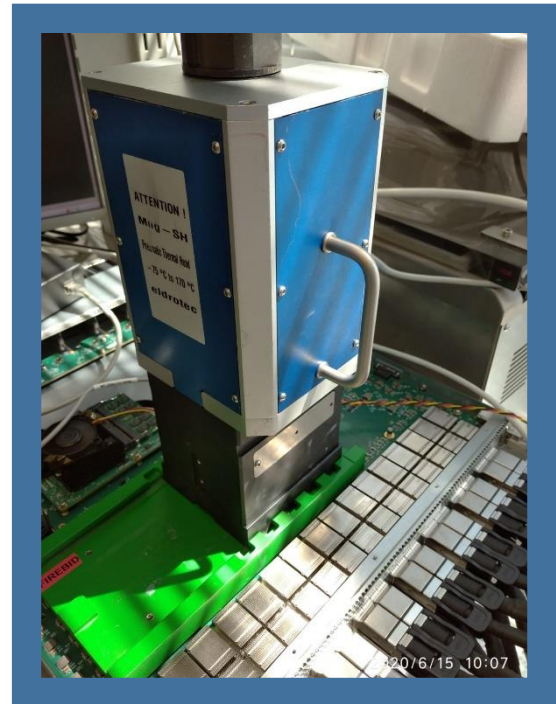
**Automatic Pressing Control on DUT:  
20-180 kg (at 6-10 bar CDA)**

**The best thermal connection with the DUT - one Click only**



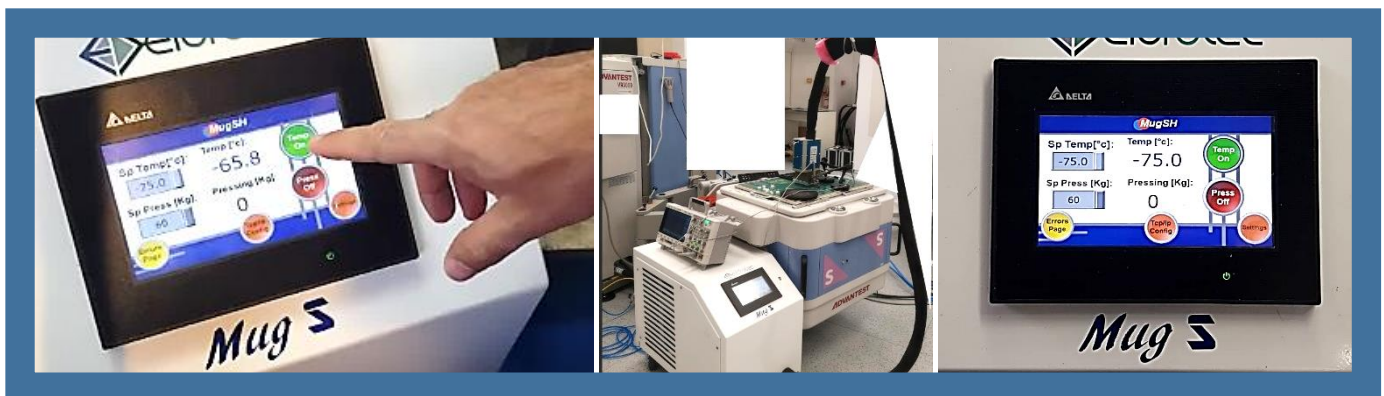
## Features

- Temperature range of **-75°C to +150°C (±1°C)**
- Precision pressure control - up to 180 kg (±1kg)
- Compact Footprint
- Self-Contained – No external chiller
- Simple operation: Air & Power --- Low cost of ownership
- Fluid-Free Operation --- Rapid Temperature Cycling Rates
- Environmentally Friendly Operation --- ESD-SAFE
- Integrated into production test handlers
- Temperature sensing: T-case \ T-junction \ T-heatsink
- Ethernet (TCP/IP) Remote Interface
- Supports \RS232\RS485 Protocol
- Suitable for testing soldered devices and devices in sockets
- Integrates with every existing socket on the market
- Packages Supported 25X25 up to 70X70 (Optional Up to 100X100)
- Maintenance-free
- Vibration free
- Variable pedestal design for future product flexibility
- Temperature stability ±1°C



## Experience user – Operator Interface

- ✓ 7"Color PLC touch screen
- ✓ Connection with the DUT in one click only
- ✓ Automatic Pressing Control on DUT
- ✓ Offset profile programming T case or customized for T junction
- ✓ Stand-by operation mode
- ✓ Temperature display and recording
- ✓ Temperature overshooting control
- ✓ LabVIEW/C++/Visual Basic drivers or Customized
- ✓ Temperature control through PT-100,
- ✓ Thermocouple via K-type or D-type



## Specifications

### System General

Temperature Range	-75°C to 170°C T-CASE: -40°C at 400W
Power Range	0-600 W (optional custom up to 1500W)
Cooling Capacity	-40°C @ 400W
Transition Rates	25°C to -40°C in ~ 1.5 min 25°C to 100°C in ~ 1 min
Temperature Stability	0.1°C
Temperature Accuracy	0.1°C
Temperature Sensor (T-Case) Optional T-j	PT100 Thermistor
Temperature Calibration	Software calibrated
Remote Interface Ports	Ethernet (TCP/IP)
System Indicators and Fail-safes	Real-time status displayed on-screen and via remote interface
Fully Automated DUT Pressure Force	20 – 180 Kg/Force ±1 Kg (Optional Up 300 Kg) At 6-10 Bar CDA or N2
DUT Dimensions	From 25X25 to 70x70mm (optional up to 100X100)
Noise Level	<52 dBA
Condensation Protection	Dry air flow <0.5 scfm

### System Requirements

Electrical	110-240VAC, 50/60Hz, 16A
Ambient Temperature	5°C to 35°C (40 to 95°F)
Ambient Humidity	20% to 80% RH
Dry Air or Nitrogen - For thermal head pressing control - To prevent condensation at very low temperatures - Hose	- 6-8 bar - 0.5cfm (1.5-3.0 PSI) Dewpoint < -70°C - 4 to 6mm Industrial Standard Quick Connector

### Mechanical Dimensions

System dimensions mm	~(L) 700mm x ~(W) 405mm x ~(H) 650mm included wheels
System Weight Kg	~ 80
Thermal head (mm)	90X108
Thermal head hose	3 meters standard, (Option to custom)