

EXCEL-1500

eldrotec

-35°C @ 1500
-75°C to 170°C

High-Power Active Thermal Forcing System

Precision Temperature Control for Next-Gen Semiconductor Validation



-75°C to +170°C



±0.1°C



-35°C @ 1500W



Precision Control



Ramping Control



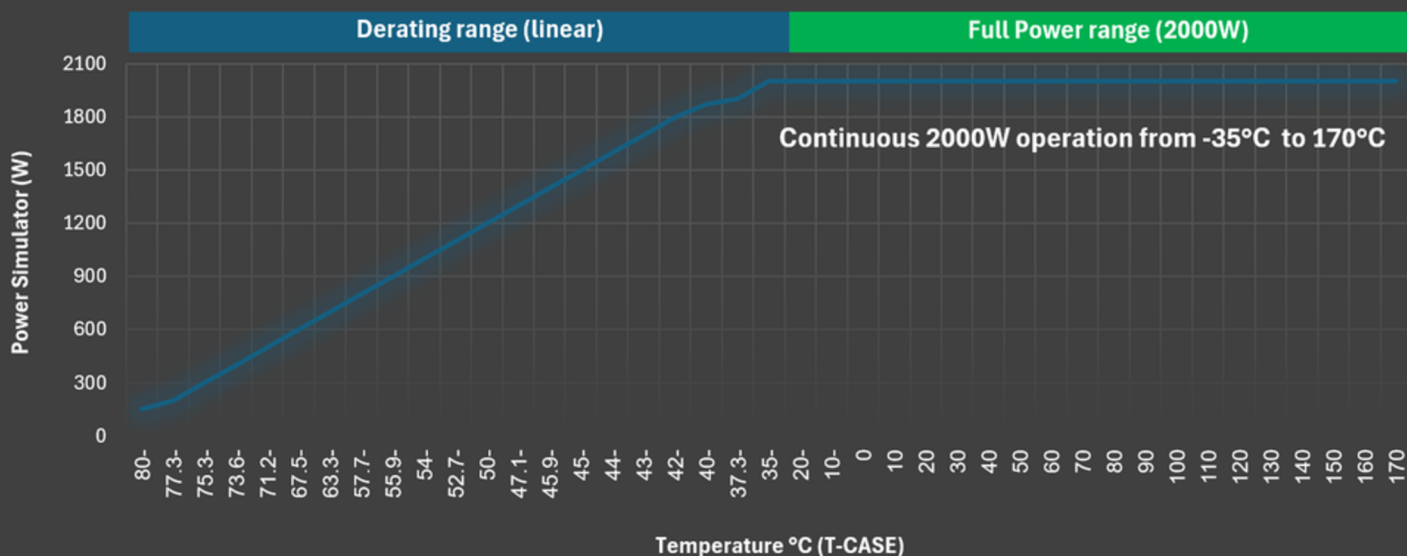
Advanced 10" Touch HMI

The **EXCEL-1500** is specifically engineered for Active Temperature Forcing of high-power devices, such as CPUs, GPUs, and AI accelerators. Unlike standard cooling solutions, our system maintains a rock-solid, stable temperature setpoint even when the DUT operates at peak electrical loads.

- **Massive Load Handling:** Built for the AI era, capable of stabilizing devices with an internal power dissipation of up to 2000W.
- **Active Power Compensation:** Specifically optimized to counteract massive heat loads, maintaining precise stability of ±0.1°C.
- **Extreme Temperature Range:** Reliable performance from -75°C to +170°C.
- **Superior Cooling Efficiency:** Achieving -35°C @ 1500W for the most demanding thermal characterization processes.

Performance Analysis & Technical Specifications

EXCEL-2000 Thermal Performance



Operating

Temperature range	-75°C to +170°C
Temperature stability	±0.1°C
Transition rates	Up to 75°C/min
Temperature sensor types	PT100 thermistor
Programmable Force-Controlled Actuation	Up to 300 Kg Optional Custom

Facilities

Power	3PH 208-230/380-440V AC 50/60Hz
Customer CDA [Recommended] To prevent condensation	<0.5cfm @ 90PSI -70°C dew point
Ambient Operating temperature	-10°C to 35°C

Mechanical Data

System size WxHxL (mm)	Type - H: 490x 1230 x 700 Type - L: 620 x 518 x 990
System weight (Kg)	~220
DUT Dimensions (mm)	Optional Up to 130X130
Controller to Thermal Head distance	~2 meter (Optional to custom)

Communication and Control

Ethernet Full Automation	TCP/IP RJ-45
USB	Optional
Touch screen display	Advanced 10" Touch HMI

Programmable Force-Controlled Actuation

- **Integrated CDA-Driven Mechanism:** High-precision pneumatic actuator for consistent and repeatable pressing cycles. Dynamic
- **Coupling Optimization:** Ensures ideal electrical and thermal contact for Socketed Devices and maximizes heat transfer for Soldered Devices.
- **Safety & Precision:** Protects delicate PCBs and semiconductor packages from mechanical stress.

