CORINTIS



CORINTIS HARDWARE 2026

THERMINATOR - THERMAL TEST AND VALIDATION INSTRUMENT FOR DATA CENTER COOLING

Contact us at sales@corintis.com

THERMINATOR TH110 — Accelerated thermal testing for data center cooling

The Therminator is a benchtop testing device for rapid pre-silicon thermal testing and cooling validation. It emulates the thermal behavior of an integrated circuit (IC) by using a physically similar test vehicle (TTV), allowing engineers to validate their cooling solutions.

DESCRIPTION

The Therminator uses spatial power density information from the powermap to control the array of heating elements on the Thermal test chip (TTC) to emulate the thermal characteristics of the IC chip. Temperature sensors in each heating element on the TTC measure the local junction temperature of the chip to provide a real-time heatmap of the chip surface. A cooling device, of the user's choice, is mounted on the TTV to cool the TTC down.

The powermap of the IC chip under test is uploaded to the device through the Display unit (DU). The control software allows the user to run several tests, cycle through various power maps, or run transient experiments. User can select multiple RTDs to compare them on the plot and save the data. Test results can be exported in standard, portable formats (CSV) and analyzed with common open-source packages.

PHYSICAL OVERVIEW

Length: 428 mm
Width: 300 mm
Height: 103 mm

Weight: 11 kg
Color: Black
Material: Anodized aluminum

TECHNICAL OVERVIEW

Output voltage: 48 V DC
Output current: 41.7 A max
DC power capacity: 2000 W
Input voltage: 100-240 V(AC); 50/60Hz
Input current: 2× 16 A @ 100 V(AC)
2× 10 A @ 240 V(AC)
Temp. resolution: 0.3°C

DISPLAY OVERVIEW

Screen size: 13.3 inch
Operating system: Linux
Display: IPS touch
Resolution: 1920x1080

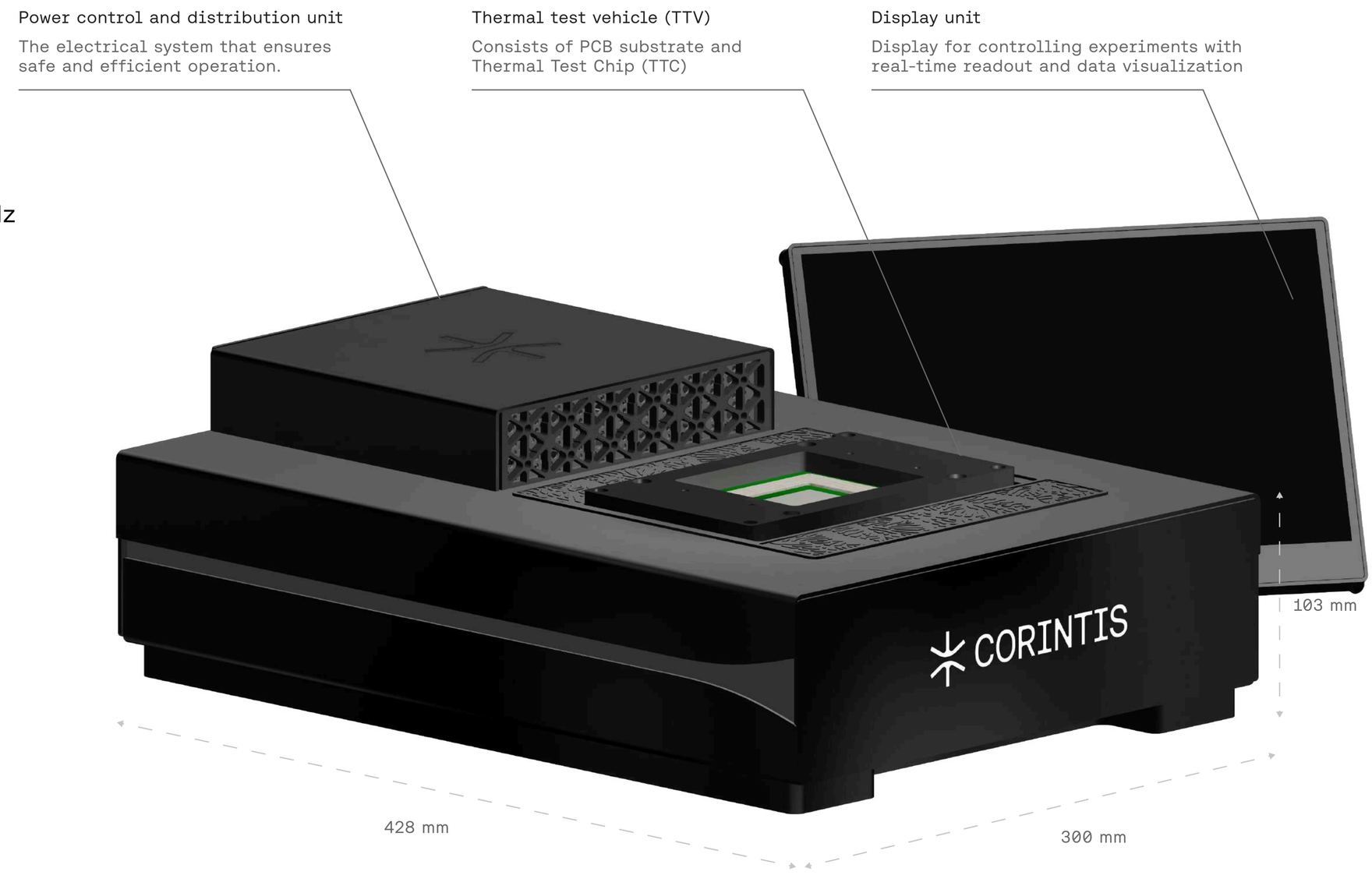
SAFETY

Class I, IP20 / NEMA 1, Overvoltage Cat. II, Pollution Degree 2, Indoor use, 5–40 °C

CERTIFICATIONS

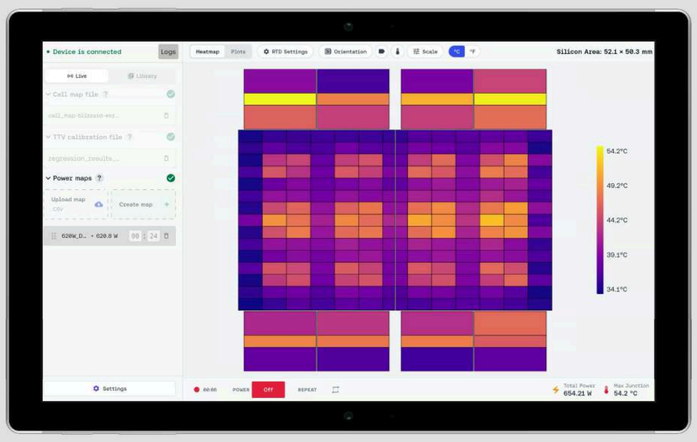
TH110 is certified to the IEC 61010-1 series for measurement, and laboratory equipment.

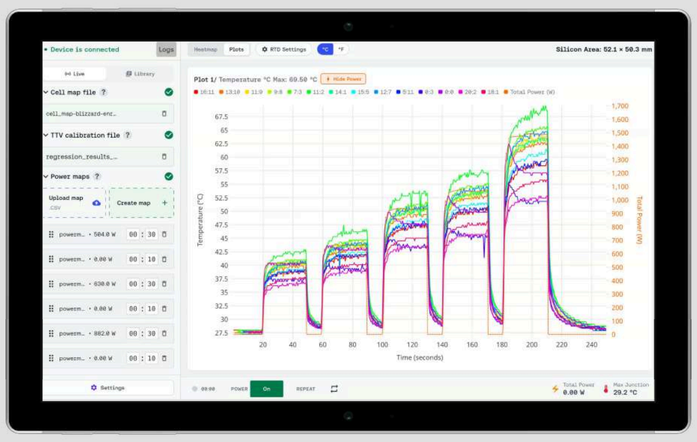
- IEC 61010-1, -2-010, -2-030
- CE (EU): EN 61010-1
- cULus (US/Canada): UL/CSA 61010-1
- Japan: JIS C 1010-1



Experiment control

- Load cell map & TTV calibration files to define sensor layout and ensure accurate temperature data.
- Apply multiple power maps with custom time ranges to simulate static & transient heating scenarios.
- Select RTDs for side-by-side comparison using live plots.
- Record & save the experiment data at any moment for later review.





Declaration of Conformity and full compliance documentation available on request — sales@corintis.com.