



T600 Thermal Platform Systems

The T600 series of thermal platform systems is the traditional configuration offering a thermal plate with a separate & remote temperature controller. Thermal platforms offer the fastest, most convenient method of testing electronic components that may be heated and cooled by direct conduction. Not only do thermal plates offer much faster thermal cycling rates than environmental chambers, but cable connections, probing and tuning of the device under test is much more easily accomplished.

Dry boxes utilizing a dry Nitrogen (GN₂) or very dry air purge system allow moisture and frost free testing below dew point. Ground & plated fixturing adapter plates and our universal hold down clamping arm are quick & easy ways to attach devices to our platform. Insulated supply hoses are also available.



Optional F4T color touch screen controller †

T600 thermal platform shown with the standard PM9 Temperature Controller

Heating of the plate is provided by resistance elements and cooling by the expansion of liquid Carbon Dioxide (LCO₂) or liquid Nitrogen (LN₂) in a computer designed and CNC machined precision channel embedded within the platform.

A large variety of standard sizes insures quick delivery of a plate that is well suited to your test requirements. Additional standard features include precision grinding and hard plating of plate surfaces, threaded 18-8 stainless steel inserts for fixturing and a built-in thermal failsafe system.

ESS also offers special thermal platform systems to handle unique test requirements such as high power components like TWT's. A dual circuit plate with dual channel controller allows you to maintain an even temperature across the entire plate surface even with a "hot spot" generated by a TWT collector. Other plates are suited to the special needs of MIC's, Hybrids, & PCB probing.

Precision ground aluminum alloy thermal plate
Very fast heating & cooling ramp rates
Extremely efficient cooling channel design
Corrosion proof 304 stainless steel chassis
2nd user device under test sensor
Ramp to set point & prog. ramp & soak profiling
Modbus RTU EIA(RS)-232/485 serial comms
Surface hard plated for extremely long wear
Comes with Configurator® utility software, molded serial cable & external 232 to 485 converter

PM9 Controller Options:

- FM approved limit/alarm "product saver"*
- Ethernet/IP—Modbus TCP interface
- GPIB-488 (not available with Ethernet option)

† For F4T features list see the ESS Controllers Feature Matrix
*FM (Factory Mutual)



T600 Thermal Platform Ordering Information

T600

Size

- 1 6.75" X 6.75" (17.15 cm X 17.15 cm)
- 2 6.75" X 13.25" (17.15 cm X 33.66 cm)
- 3 6.75" X 20.00" (17.15 cm X 50.80 cm)
- 4 6.75" X 26.25" (17.15 cm X 50.80 cm)
- 5 11" X 11" (27.94 cm X 27.94 cm)
- 6 11" X 22" (27.94 cm X 55.88 cm)
- 7 10" X 15" (25.4 cm X 38.1 cm)
- 8 15" X 15" (38.1 cm X 38.1 cm)
- 9 18" X 22" (45.75 cm X 55.88 cm)

Voltage

- 1 115 VAC 50/60 Hz
- 2 230 VAC 50/60 Hz

Coolant

- 1 LN₂ 15-25 PSIG (+200° C to -99° C)
- 2 LCO₂ 300 PSIG (+200° C to -65° C)
- 3 LCO₂ 900 PSIG (+200° C to -65° C)

Controller

- | | | | |
|---|---|---|--------|
| A | PM9 w/Std. bus & Modbus RTU EIA-232/485 | D | F4T-1* |
| B | PM9 w/Std. bus & Modbus RTU EIA-232/485 & GPIB-488 | E | F4T-2* |
| C | PM9 w/Std. bus EIA-232/485 & Ethernet/IP - Modbus TCP | F | F4T-3* |

*See the F4T Feature Matrix sheet for a list of the F4T-1, F4T-2 & F4T-3 features

Country

- A Continental Europe
- C Australia/New Zealand
- D United Kingdom/Ireland
- E Denmark
- F France/Belgium
- G India/South Africa
- H Israel
- I Italy
- J Japan
- K USA (North America)
- L Switzerland
- O Russia
- X China
- T Argentina

Example: T600-113AK T600 Thermal Platform System, 6.75" X 6.75", 115 VAC 50/60 Hz, LCO₂ 900 PSIG, PM9 Controller with serial 232, North America (USA) plug on power cord

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