Standard and Custom Thermal Platforms

Sigma Systems employs over 50 years of designing temperature test systems. Our thermal platforms are ideal for testing and conditioning thermally conductive components and materials. Platforms add the benefits of fast temperature transitions, small footprint, easy test access, and high heat load absorption.

Features and Options

► -100° to +250°C with transition rates up to 80°C/minute
► Platform length and width configured for your test setup
► Covers, adapter plates, and hole patterns for enclosing and securing test components
► Dry air purge to reduce moisture and prevent frost
► Independent fail safe to protect components from over-temperature conditions
► Control and communications: Touch-screen controller, IEEE-488 GPIB, RS232 Serial, Ethernet, Telnet, web server
► ISO 9001:2008, RoHS, CE, UL61010

Cryogenic vs. Mechanical

Cryogenic cooling systems use Liquid Nitrogen (LN₂) or Liquid Carbon Dioxide (LCO₂) for rapid transitions and wide temperature ranges. They typically have a lower initial cost but require replacement of expendable coolants.

Mechanical cooling systems use compressors and conventional refrigerants in a closed-loop cooling system. They typically have a higher initial cost but are less expensive to operate.

Temperature Ranges

![](temperature_ranges.png)