



## Standard and Custom Thermal Chambers

Sigma Systems employs over 50 years of designing temperature chambers that are optimized for the application. We offer a wide range of chamber shapes, sizes, and configurations that accommodate the needs for test access, cable routing, test visibility, wide temperature ranges, and rapid temperature transitions.

### FEATURES & OPTIONS:

- -185° to +500°C with transition rates up to 100°C/minute
- Chamber sizes: height, depth, and width configured for your test setup
- Test access: cable notches, access ports, pull-off doors, shelves, windows, all sized and located to test setup
- Control and communications: Touch-screen controller, IEEE-488 GPIB, RS232 Serial, Ethernet, Telnet, web server
- Castered stands, bench top, rack mount configurations
- ISO 9001:2008, RoHS, CE, UL61010

*Precision control, multiple I/Os, and diagnostics*

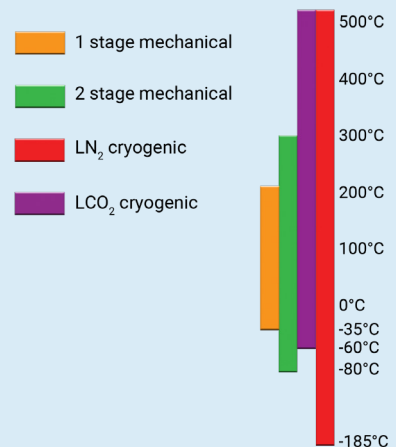


### Cryogenic vs. Mechanical

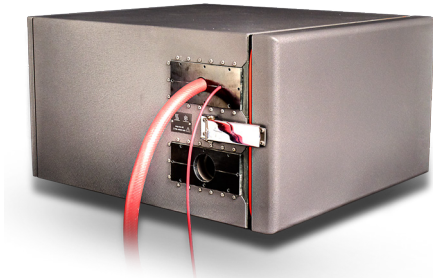
Cryogenic cooling systems use Liquid Nitrogen (LN<sub>2</sub>) or Liquid Carbon Dioxide (LCO<sub>2</sub>) for rapid transitions and wide temperature ranges. They typically have a lower initial cost but require replacement of expendable coolants.

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.

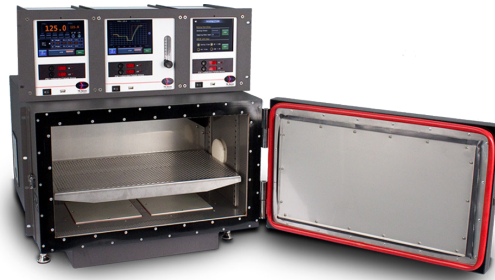
### Temperature Ranges



# Sigma Thermal Chambers for a variety of industries and applications



Guidance Telemetry Systems



Avionics Systems Production



PCB Batch Production



LED Production



Telecom Components



Industrial Components



Materials Tensile



Industrial Sensors