Auxiliary Thermal Control System

Deliver programmable control of heat and power to your test article

Dynavac's Auxiliary Thermal Control Systems (ATCS) adds auxiliary heating and power to flight hardware during test periods. This flexible platform enables defining power channels and programming individual channel DC power output to match your test criteria.

System highlights

- Dynavac's Auxiliary Thermal Control System provides heating & power capability for hardware testing
- Flexible number of channels and a wide range of DC power output ranges can be supplied to meet your requirements
- Each channel can be controlled by voltage output, power output, temperature, and temperature ramp rate
- Operator monitors and operates all channels through a PC-based program
- Single or multiple power supply rack configurations available. Each rack is controlled by its own PLC
- Optional supervisory safety shut-off system available

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ATCS features

- Easy to use operator interface
- Configurable alarm and tend screens
- Test configurations can be stored and retrieved
  - Created custom recipes
  - Change multiple channel parameters using Dynavac's EZ Update Menu
  - Control channels from remote temperature reading
- Data stored in a text spreadsheet file and available ; downloadable via Servia port
- Tuned PID control
- Redundant thermocouple control

Hardware and software

- Robust hardware:
  - Compatible with power supplies from any manufacturer
  - Programmable logic controller architecture used for reliability and safety
  - Rack-mounted LCD monitor, keyboard, and mouse drawer
- Standard, widely-used software:
  - National Instruments LabVIEW
  - Microsoft SQL database

Main Control Screen

Dynavac- creating the environment for your mission success