CRYOMAGNETICS, INC.
INNOVATIVE TOOLS FOR SCIENTIFIC RESEARCH



Model TM-620 Temperature Monitor

Cryomagnetics' Model TM-620-2 (2-Channel) and TM-620-4 (4-Channel) Temperature Monitors are designed to provide the user with easy to use, precision temperature monitoring at a reasonable cost.

The unit has been designed to meet the requirements of monitoring temperature in superconducting magnet systems and other cryogenic applications.

The bright TFT-LCD display offers user selectable formats which include simultaneous display of all channels. A full numeric keypad allows for navigation through an intuitive menus tree where most features and functions can be configured.

Sensor Types Supported:

Constant-Current, Negative Temperature Coefficient (NTC) sensors. Industry standard sensors including RO-600 and others.

Constant–Current, Positive Temperature Coefficient (PTC) resistor sensors types include Platinum and Rhodium-Iron.

10µA Constant-Current, DC excitation Silicon Diode sensors are supported across their full range.

Specifications:

24bit ADC.

5VDC Compliance/Measurement range.

1mA, 100µA, 10µA constant current excitation.

6 User customizable 200 point curves.

RO-600 and PT100 calibration curves pre installed.

4 wire measurements for accurate, low noise measurements.

Automatically corrects for internal temperature drift.

Input Power:

100-277VAC 50-60Hz.

Data Interface:

LabVIEW® and Python virtual instrument drivers are available to allow computer control via a familiar, intuitive interface. Firmware updates may be installed via Ethernet connection.

Online ordering is available for our electronic products and cryogenic accessories such as current leads.

Standard Features:

- Model 620-2, Two independent channels.
- Model 620-4, Four independent channels.
- Front panel display units, K, C, F voltage or ohms.
- Supports Diode, Platinum, RTD and cryogenic RTD sensors.
- Remote control via ethernet, USB RS-232 standard.
- 2X 60VDC/100mA Alarm relays
- 4-20 mA Analog Output
- Firmware updatable via Ethernet connection.
- LabVIEW® and Python drivers available at no extra charge.

Optional Features:

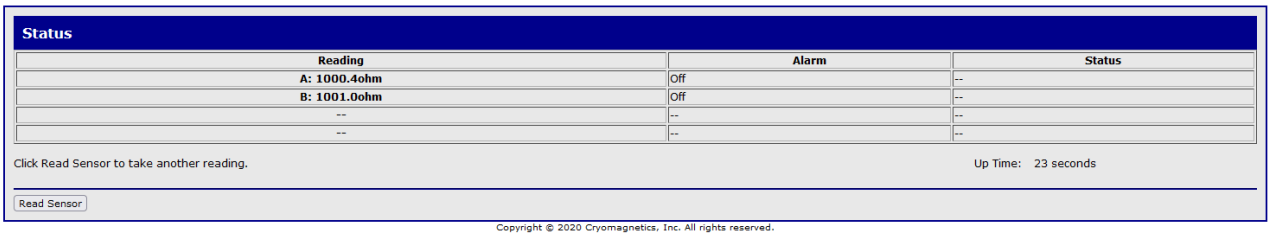
- Option 1: IEEE-488.2 Interface
- 19" Rack Mount

1006 Alvin Weinberg Drive • Oak Ridge, Tennessee 37830 • Telephone (865) 482-9551 • Fax (865) 483-1253
Web: www.cryomagnetics.com • Email: sales@cryomagnetics.com

Web based access to data and instrument configuration

Monitors connect directly to any 100/10 Ethernet Local-Area-Network (LAN). The TCP and UDP data port servers bring fast Ethernet connectivity to data acquisition software including LabView™. Using the SMTP protocol, the monitor will send e-mail based on selected alarm conditions. Using the Ethernet HTTP protocol, the monitor's embedded web server allows the instrument to be viewed and configured from any web browser.

Remote Command Language: The Monitor's remote command language is SCPI compliant according to the IEEE-488.2 specification. SCPI establishes a common language and syntax across various types of instruments. It is easy to learn and easy to read.



Model TM-620 Web interface



Model 620-4 Rear Panel View

Contact us today for information on the following products!

Model 4G Series of Four Quadrant Superconducting Magnet power Supplies

Available in outputs of 100A, 150A, 200A and 100A-Dual Configurations, The Model 4G represents our "4th Generation" of power supplies optimized for the high inductive loads associated with superconducting magnet operation.

Model LM-510 Liquid Cryogen Monitor

It is now possible to purchase a liquid cryogen monitor capable of simultaneously monitoring and displaying level for up to two LHe and/or LN2 channels. Available as the LM-510-13 option, the unit can be configured to monitor and control liquid levels in recondensing dewar systems.

CRYOMAGNETICS, INC.
INNOVATIVE TOOLS FOR SCIENTIFIC RESEARCH

1006 Alvin Weinberg Drive • Oak Ridge, Tennessee 37830
Telephone (865) 482-9551 • Fax (865) 483-1253
Web: www.cryomagnetics.com • Email: sales@cryomagnetics.com

2024, Rev 1