HAMPSHIRE
CONTROLS

"Safeguarding Your Precious Biological Materials"

MULTI-PROBE ALARM SYSTEM

STATUS
1: 21.5°C
2: 57%RH
3: 21.5°C
4: 56%RH

ALARM

TEST/RESET STEP ▼ ▲ MUTE/MENU

HAMPSHIRE CONTROLS CORPORATION

MPS-HT Series Temperature & Humidity Monitor/Alarm

FEATURES:

- Continuously monitors 1 or 2 NIST-traceably calibrated temperature probes (-100 °C to +100 °C)
- Continuously monitors 1 or 2 NIST-traceably calibrated humidity probes (0 %RH to 95 %RH)
- Easy-to-read backlit 128 x 64 graphic display in °C or °F with variable precision (1 °, 0.1 °) and %RH
- Retrievable min/max observed temperature & humidity values
- Channel independent adjustable high/low alert condition settings and alarm delay periods
- Tri-color status LEDs for each probe
- Audible alarm with independent alarm mute periods
- Up to 4 output channels: 4 to 20 mA
- Up to 4 SPDT relay contact outputs with independent adjustable relay delay periods
- Built-in LiPo battery backup
- Tilt-adjustable desk/wall mounting bracket

PRODUCT DESCRIPTION:

The MPS-HT series is a 2- or 4-channel NIST-traceable, real-time, temperature and humidity verification system with channel independent, user-adjustable low- and high-temperature and low- and high-humidity alarm limits.

Used in chemical and biochemical research laboratories, medical and pharmaceutical laboratories, vaccine and pharmaceutical manufacturing, incubators, seed germination and plant growth testing, food storage, and a wide variety of other applications requiring traceable temperature and humidity monitoring and control, the MPS-HT is easy to setup and intuitive to operate.

The standard temperature probe range of the MPS-HT series is -100 °C to +100 °C (with ffl0.2 °C accuracy and 1 ° or 0.1 ° precision), but other temperature ranges using alternate probe types are available. The standard humidity probe range is 0% - 95% relative humidity (%RH) at temperatures from 0 °C to +50 °C, but alternate humidity probes are also available.

Custom programming and packaging can be provided to satisfy any temperature and humidity monitoring application.

AVAILABLE OPTIONS:

- 1 or 2 NIST-traceably calibrated temperature probes (-100 °C to +100 °C)
- 1 or 2 NIST-traceably calibrated humidity probes (0 %RH to 95 %RH from 0 °C to 50 °C)
- -200 °C (-328 °F) to +400 °C (+752 °F) with variable ranges and temperature probe types (100/1000-Ohm RTD; cryo RTD; Type T, K, J thermocouples, etc.)
- Up to 4 probe output channels: 4 to 20 mA
- Up to 4 SPDT relay contact outputs with independent adjustable relay delay periods
- Large display panel for cabinet mounting

MADE IN U.S.A.

Probes	Temperature (1 or 2 Probes)	Humidity (1 or 2 Probes)
Sensor & Probe	100-ohm RTD, 4" (102mm) s.s. sheath, 10' (3m) lead, Teflon jacketed, waterproof	Configuration varies with humidity probe type. **MPS-HT** compatible with humidity probes with 0 - 5 V, 0 - 10 V, and 4 - 20 mA outputs
Humidity Range (%RH)		5 – 95%, non-condensing, typ
Temperature Range (°C)	-100.0 to 100.0 °C	0 to 50 °C, typ
Temperature Range (°F)	-148.0 to 212.0 °F	32 to 122 °F, typ
Accuracy/Repeatability	±0.2 °C	±4%, ±1% repeatability, typ
Accuracy (°F)	±0.4 °F	
Display Units	°C or °F	%RH

Alarm	Frequency	Amplitude	User-adjustable initial alarm delay period
Audio	3.0 – 3.6 kHz	85-90 dB	Selectable audio mute period
Visual	~1 Hz flashing red LED		

Output Options	
Single Relay (SPST)	Form A (normally open – NO) Form B (normally closed – NC)
Single Relay (SPDT)	Form C (user selectable NO or NC)
Independent Relay Per Channel (SPDT)	Form C (user selectable NO or NC), per channel
Voltage	Specify range between 0.2 V and 10 V with a 1:5 ratio. Examples: 1 - 5 V, 2 – 10 V, etc.
Current (4 to 20 mA)	Receiver powered; requires external loop supply (12 to 36 VDC)
Ethernet	10/100 Base-T, with data accessible via HTTP and/or the **T° Sentry ALERT Monitoring System** data logger, when equipped with the **MPS Operating Program**

Battery Backup	
3.7V Rechargeable	1150 mAh Li-polymer cell, constant current and voltage charger, automatic recharge

	Load	Supply
Power Requirements	7 - 24 VDC, 18 W max	Standard 120-240 VAC/15 VDC 1.2 A – 2.4 A, US, UL listed

Mechanical & Environmental	
Mounting Options	**Standard:** Cabinet top mount with bracket **Option 1:** Wall mount **Option 2:** Large display flush/panel mount (special order)
Dimensions, WxHxD	7.0 x 4.0 x 2.0 in. (178 x 102 x 51 mm)
Weight	1.6 lbs. (711 g)
Case	Black Bakelite
Operating Temperature Range	-18 to 55 °C (0 to 130 °F)

MPS Web Accessible Operating Program Featuring	Hardware Requirements
• Real time data visualization • Sensor channel configuration and calibration • Mathematical and logic functions • Alarm limits and delay settings • Email, SMS text settings and options	• PC with Ethernet and modern browser

Note: Not all features and options are compatible. MPS Web Accessible Operating Program is not compatible with MPS-HT Monitor/Alarms that include independent per-channel output relays or 4 – 20 mA output or voltage output.

One-year warranty on all Hampshire Controls products.

About Us: Established in 1975, Hampshire Controls provides standard and custom-designed electronics to the biomedical and industrial markets. In addition to the wide variety of **MPS Multi-Probe Monitor/Alarms,** our product portfolio includes:

- **T° Sentry Model 140** single probe temperature monitor/alarms
- **TT-150/200** temperature & humidity Wi-Fi transmitters
- **LD-215 Liquid Nitrogen Level Detector/Alarms**
- **Air Flow Monitors** (50 to 2500 FPM)
- **STEDIVOLT SV2005 Line Voltage Controls**
- Customized OEM electronics design and manufacturing

- **T° Sentry ALERT Monitoring System** data logging
- CO_2, LN2 **CA5000 Freezer Backup Systems**
- **TC-12 TEMPCHECK Rapid Response Thermometers**
- **ADM-215 Remote Alarm Delay Modules**
- Customized monitoring, alarm notification, and logging

MADE IN USA