

HAMPSHIRE



CONTROLS

*"Safeguarding
Your Precious
Biological
Materials"*



MPS Multi-Probe Monitor/Alarm

PRODUCT DESCRIPTION:

The MPS series is a 2 - 8 channel NIST-traceable, real-time, temperature verification system with channel independent, user-adjustable low- and high-temperature alarm limits. Easy to setup and intuitive to operate, with optimally positioned temperature probes, the MPS will monitor your process with superlative precision.

The MPS products are highly accurate and reliable temperature monitoring systems widely used in laboratories, hospitals, and food storage facilities.

In addition to the easy-to-read backlit 128 x 64 graphic display, temperature readings are output in real-time via TCP/IP (Ethernet) and can be displayed on any modern web browser. Alternatively, temperature readings can be optionally output as current (4 to 20 mA) or into our PC-based networked *ALERT* Monitoring System for data logging, statistical process control (SPC), and alert email/SMS text notification.

**Custom programming and
packaging can be provided to
satisfy the monitoring of
most measurable physical or
chemical properties.**



FEATURES:

- Continuously monitors up to 8 NIST-traceably calibrated temperature probes
- -200 °C to +400 °C with variable ranges and probe types
- Easy-to-read backlit 128 x 64 graphic display in °C or °F with variable precision (1 °, 0.1 °)
- 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 temperature output channels: 4 to 20 mA
- Up to 4 SPDT relay contact outputs with independent adjustable relay delay periods
- Optional email and/or text notifications of alert conditions via Ethernet
- Web browser accessible real-time data display and programmability
- Authenticated administrative programming authorization with user and guest access

AVAILABLE OPTIONS:

- Up to 8 NIST-traceably temperature probes
- -200 °C (-328 °F) to +400 °C (+752 °F) with variable ranges and probe types (100/1000-Ohm RTD; cryo RTD; Type T, K, J thermocouples, etc.)
- Probe inputs: 4-20 mA, 0 - 1 V, 0 - 5 V, 0 - 10 V, switch inputs (magnetic door switches, etc.)
- Specialty probes: humidity, CO₂, pressure, positional displacement, etc.
- Up to 4 probe output channels: 4 to 20 mA
- Up to 4 SPDT relay contact outputs with independent adjustable relay delay periods
- Optional email and/or text notifications of alert conditions via Ethernet

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MPS Multi-Probe Monitor Alarm

Probe Options (#1 - #8)	Temperature		Voltage	Current	Other
Sensor & Probe 10' (3m) lead, Teflon jacketed, waterproof	100-ohm or 1000-ohm RTD, 4" (102mm) s.s. sheath	Type T, J, or K thermocouple. 3" (76mm) s.s. sheath	Other sensors available: humidity, O ₂ , CO ₂ , pressure, magnetic reed switches (door sensors), digital input, LN ₂ level sensors, Dewar vacuum breach sensors, other temperature probes, etc.		
Primary Range (°C, other)	-100 to 100 °C	T: -200 to 50 °C K: 0 to 400 °C	0 – 1 V 0 – 5 V 0 – 10 V	4 – 20 mA	
Secondary Range (°F)	-148 to 212 °F	T: -328 to 122 °F K: 32 to 752 °F			
Accuracy (°C, other)	±0.2 °C	±2 °C	Probe type dependent		
Accuracy (°F)	±0.4 °F	±4 °F			
Display Units	°C or °F	°C or °F	User selectable for each channel, up to 3 characters		
Display Resolution	User selectable for each channel, 0 to 3 decimal places, ≤7 characters per channel				
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				
Power Requirements					
	Load	Supply	Optional Supply		
Power Requirements	6 Vdc, 800 mA max	Standard 120-240 VAC, US, UL listed	7-24 VAC/DC (special order)		
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		
<ul style="list-style-type: none"> Real time data visualization Sensor channel configuration and calibration Mathematical and logic functions Alarm limits and delay settings Email, SMS text settings and options 			<ul style="list-style-type: none"> PC with Ethernet and modern browser 		

Note: Not all features and options are compatible.

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
- CO₂, LN₂ **CA5000 Freezer Backup Systems**
- TC-12 TEMPCHECK Rapid Response Thermometers**
- ADM-215 Remote Alarm Delay Modules**
- Customized monitoring, alarm notification, and logging

