

wall mount Multi-Channel Process Scanner

Stand Alone Unit Monitors up to 7 Independent Process Inputs



wMPS 400/450 Series - 4 zones
wMPS 700/750 Series - 7 zones

Only
\$595
Base unit

DESCRIPTION Housed in a wall mount, water tight plastic enclosure, the wMPS Series scanner offers a highly functional multi-channel scanner with a number of very useful features. Tasks that require multiple monitors can now be accomplished by using only a single unit. Signals from seven different transducers are brought into screw terminals that are conveniently located and accessed through a sealed plastic cover. The unit automatically scans each channel, displaying the channel number and its process reading.

POWERFUL DISPLAY MODES

- Large 7-Segment LED Display (0.8")
- Multiple Programmable Display Modes - scan, timer, high/low channel etc.
- Frequently Used Math Functions - min/max, rate, deviation, differential, etc.
- Selectable Temperature Units - Deg C or F
- Process Readings in Engineering Units
- Programmable Eng Unit Labels - PSI, Ft, etc.

FULLY PROGRAMMABLE

- Fully Programmable Via Front Keys
- Programmable Automatic Scanning
- Programmable Channel Display Time
- Hold Feature to Dwell on Any Selected Channel
- Manual Access to All Available Data at All Times
- Program Settings Retained on Power Down
- Individually Programmable Inputs (450/750)

WIDE RANGE OF INPUTS

- Four & Seven Channel Temperature & Process Inputs
- Thermocouples, RTDs & Thermistors
- Current, Voltage & Millivolt Signals
- Simple Scaling for Voltage, Current & Millivolt Signals
- Each Input Individually Programmable (450/750)
- Multiple Input Types in a Single Unit (450/750)
- Common Input Type for all Inputs (400/700)

MULTIPLE ALARM OPTIONS

- Programmable Limit for Each Channel
- Built-in Buzzer to Sound Alarm
- Visual Indication of Channel Alarm Status
- Separate Control Relay for Each Channel (Optional)
- Normally Open/Closed, Latching/Non-Latching Relays
- Solid State (Open Collector) Outputs (Optional)
- Power Line Filter for High Reliability



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Signals from thermocouples, rtds and thermistors are linearized and can be displayed in degrees Centigrade or Fahrenheit. Current, voltage and millivolt signals are easily scaled for indicating the process in relevant engineering units. Since up to seven different processes can be displayed on a single scanner, therefore, each channel can be given its own three alphabets long engineering units e.g. PSI, Ft, Yds, etc. Channels are sequentially displayed for a programmed length of time. The hold feature allows for the display to be held indefinitely on any one channel.

wMPS has multiple display modes and can be programmed to scan all channels, display channel with highest or lowest reading, process deviation from a pre-programmed setpoint, display differential between channels or just run as a timer.

Additional features include Min/Max readings and rate of change for all channels. Also provided as an option is a control relay or open collector output for each channel. A built-in buzzer provides an audio alarm whenever a limit is reached. Visual indication of relay output status is given by LEDs on the front panel.

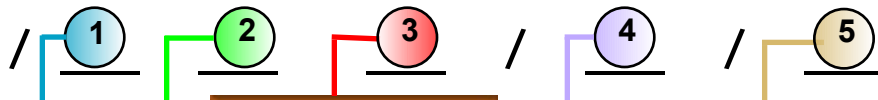
This series is offered in 2 different models: The basic model (wMPS400/700) accepts only one type of transducer signal on all four/seven inputs. Same scaling is applied universally to all channels for linear voltage or current signals. The enhanced version (wMPS450/750) has fully programmable inputs and each channel can be configured independently to accept thermocouples, 4-20ma or voltage signal. Thus one channel could be displaying temperature, while the second channel displays pressure (e.g. 4-20ma) and the third, liquid level (e.g. 0-10vdc).

TYPE	RANGE	ACCURACY
J	-200 to 1190C -328 to 2174F	+ ₁ C+ ₁ cnt +2F+ ₁ cnt
K	-170 to 1370C -274 to 2500F	+1C+ ₁ cnt +2F+ ₁ cnt
T	-160 to 400C -256 to 752F	+1C+ ₁ cnt +2F+ ₁ cnt
E	-185 to 915C -300 to 1675F	+1C+ ₁ cnt +2F+ ₁ cnt
R	0C to 1600C 32F to 2900F	+3C+ ₁ cnt +6F+ ₁ cnt
S	0 to 1600C 32 to 2900F	+3C+ ₁ cnt +6F+ ₁ cnt
B	470 to 1800C 900 to 3300F	+3C+ ₁ cnt +6F+ ₁ cnt
RTD-385	-200 to 800C -328 to 1472F	+1C+ ₁ cnt +2F+ ₁ cnt
RTD-392	-100 to 450C -148F to 842F	+1C+ ₁ cnt +2F+ ₁ cnt
Thermistor	-8.0 to 100.0C 17.2 to 212.0F	+0.5C+ ₁ cnt +1.0F+ ₁ cnt
Current	1 to 30000	.05%+ ₁ cnt
Milli-volt	1 to 30000	.05%+ ₁ cnt
Voltage	1 to 30000	.05%+ ₁ cnt

Ordering Guide

To find a model number, fill in blanks 1, 2, 3, 4 and 5 with appropriate selection. Refer to ordering example below:

wMPS400/700
wMPS450/750



BM = J, K, T & E Thermocouples
R = 'R' type Thermocouple
S = 'S' type Thermocouple
B = 'B' type Thermocouple
TH = Thermistor
100MV = 100 Millivolt
RTD = RTD (.00385 & .00392)

1 = 4-20 Milliamp loop Current
2 = 0-50 Milliamp loop Current

3 = 0 - 5 VDC
4 = 0 -10VDC

5 = 120VAC
6 = 240VAC
7 = 15VDC

R = 4/7 Relay outputs (4 for 4 CH, 7 for 7 CH)
OC = 4/7 Solid State outputs (Open Collector)
Blank = No Output

Ordering Example: wMPS750/BM14/5/R -- Wall mount, seven channel Scanner with J,K,T & E Thermocouple, 4-20ma and 0-10vdc inputs, 120vac Power and relay output option.

Seperate terminal compartment
for ease of wiring



Specifications

INPUT TYPE:

Input types: J,K,T,E,R,S,B, RTD & Thermistor,
4-20ma, 0-50ma, 0-5vdc, 0-10vdc
Cold junction comp. error: +/- 1C Max (10 to 40C)
Open thermocouple indication: HELP displayed.

Custom inputs available: Consult factory

SCAN RATE/ DISPLAY TIME:

Fixed: Two channels per second.
Display time: Programmable from 1-9999 seconds.

RELIABILITY/ACCURACY:

Calibration: NIST traceable (temperature)
Resolution: 1 degree C or F, Thermistor = 0.1 C/F
Selectable display units: Centigrade or Fahrenheit

ANALOG TO DIGITAL CONVERSION:

20,000 count A/D converter
Dual slope integrating converter.
Conversion rate: Seven conversions/sec (typical)

DISPLAY:

Red 7-segment LED display, 0.8 inch (20mm) height
Negative polarity indication. Over-range indication: HELP
Display test: Briefly indicates 8.8.8.8.8.8. on power up

ELAPSED TIME:

Displayed in hours, minutes & seconds. Format: HH.MM.SS

POWER OPTION:

120VAC -- 60 Hz (Standard) 220VAC -- 50 HZ (Opt)
8VDC -- 12VDC @ 900ma (optional)

RELAY/OPEN COLLECTOR OUTPUT:

Relays: Single pole single throw, 1 amp @ 28vdc or 0.5 amp @120vac

Open Collector output: 50ma max (internal 5vdc source).

ENCLOSURE/DIMENSIONS:

Case: 7.55" W x 6.29" H x 4.05" D (Plastic Enclosure)
Ingress Protection: up to IP65 (DIN Standard)