wall mount Multi-Zone **Process Controller**

4/7 Zone Ramp & Soak Controller Offers Large Display and Programmable Inputs



wMPC400 Series - 4 zones wMPC700 Series - 7 zones

Unmatched Value

- Upto 7 Controllers in a Single Enclosure
- Multiple Input Types in a Single Unit
- Ideal for a Full Range of Applications
- Control Simple to Complex Processes

DESCRIPTION Housed in a wall mount, water tight plastic enclosure, the wMPC Series offers a highly versatile controller.

The unit offers multiple control modes that are ideal for a full range of applications from complex to simple processes.

2 Mg Input type for each zone is selected independently. Scaling and offset allows current and voltage signals to be converted and displayed in engineering units. Temperature from thermocouples, RTDs and thermistors can be displayed in degrees Centigrade or Fahrenheit. Additionally, each zone has its own ramp/soak profile with up to 7-segments.



HIGHLY VERSATILE CONTROLLER

- Four & Seven Zone Controller
- On/Off. PID. Heat/Cool
- 7-Segment Ramp & Soak Profile
- Independent Profile for Each Zone
- Separate Control Settings for Each Zone
- Manual Setpoint Entry for Each Zone
- Indefinite Hold During Ramp

WIDE RANGE OF INPUTS

- Four & Seven Input Models
- Each Input Configurable from Front Keys
- Thermocouples. RTDs, Thermistors
- 4-20 mA, 0-10 Vdc, Millivolts
- Scaling for Millivolts, Voltage, & Current

HIGH VISIBILITY DISPLAY

- Large 7-Segment LED Display (0.8")
- Ease of Viewing from Distance
- Better Visibility than Typical Panel Mount Units
- Multiple Display Modes
- Protection from Dust & Moisture
- Sealed Lockable Enclosure with Clear Plastic Front

Sealed enclosure provides protection from dust and moisture

> For further information. contact: Tel. No: (480) 607-3100 (ext 201) Fax No: (480) 607-3101 www.kaifdigital.com

SPECIFICATIONS

INPUT TYPE: i) J,K,T,E,R,S,B, thermistor, RTD ii) 4-20milliamp loop current iii) Voltage iv) Millivolt CJC error: +/- 0.5 C (10C to 45c) Open T/C indication: HELP displayed ACCURACY: Temperature resolution: 1C/1F Voltage = 0.05% FS Current = 0.05% FS **RESOLUTION**: 1C/F for T/C'S, rtd, 0.1C/0.2F for thermistor A/D CONVERSION 20,000 count A/D converter Conversion rate: 7/Sec (typical) DISPLAY Red 7-seg LED display, 0.8" (20mm) Ht Display test: 8.8.8.8.8.8. on power up SCAN RATE Two channels per second CHANNEL DISPLAY TIME Programmable from 1-999 seconds. POWER OPTION 120VAC -- 60 Hz (Standard) 220VAC -- 50 HZ (Optional) 15VDC @ 900ma (optional) SCALE: Programmable from 1 - 30000 OFFSET 0 - 100.00 (millivolt) 0 - 20.00 (current), 0 - 10.000 (voltage input), Dec. Pt: None, 10th, 100th, 1000th 0 - 500 Seconds RATE: **PROPORTIONAL BAND:** 0 - 100% of span RESET: 0.00 TO 50.00 repeats/ minute

ON/OFF DEADBAND:

CONTROL OUTPUT:

DIMENSIONS

Programmable: 0-Fullscale

5VDC drive @50ma/Per Channel

Case: 7.55" W x 6.29" H x 4.05" D

RTD = RTD (.000385 &.000392)

ON/OFF as well as PID control is offered for optimum process stability. Processes that do not require tight control through complex tuning of PID parameters can be run under simple ON/OFF control. Each zone has its own set of ON/OFF and PID parameters and each zone can be programmed for heating or cooling. Setpoint devi-

ation, positive as well as negative, can be viewed.

Additional functions include min/max reading for each zone, indefinite program hold, automatic scanning and displaying of different zones and three display modes (setpoint



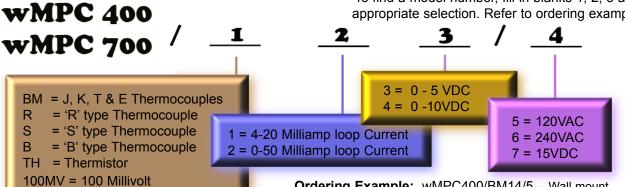
only, process only or both setpoint and process). Power, control, and process signal connections are conveniently made with Euro style plug-in connectors.

Each zone has a three digit long engineering label that can be programmed to indicate the type of process being controlled e.g. C or F for temperature, PSI for pressure etc. Every controller's run status is indicated by LEDS. Channel display time is also programmable.

<u>TYPE</u>	RANGE	<u>ACCURACY</u>
J	-200 to 1190C	+_1C+-1cnt
	-328 to 2174F	+-2F+-1cnt
к	-170 to 1370C	+-1C+-1cnt
	-274 to 2500F	+-2F+-1cnt
Т	-160 to 400C	+-1C+-1cnt
	-256 to 752F	+-2F+-1cnt
E	-185 to 915C	+-1C+-1cnt
	-300 to 1675F	+-2F+-1cnt
R	0C to 1600C	+-3C+-1cnt
	32F to 2900F	+-6F+-1cnt
S	0 to 1600C	+-3C+-1cnt
	32 to 2900F	+-6F+-1cnt
В	470 to 1800C	+-3C+-1cnt
	900 to 3300F	+-6F+-1cnt
RTD-385	-200 to 800C	+-1C+-1cnt
	-328 to 1472F	+-2F+-1cnt
RTD-392	-100 to 450C	+-1C+-1cnt
	-148F to 842F	+-2F+-1cnt
Thermistor	-8.0 to 100.0C	+-0.5C+-1ct
	17.2 to 212.0F	+-1.0F+-1ct
Current	1 to 30000	.05%+-1cnt
Milli-volt	1 to 30000	.05%+-1cnt
Voltage	1 to 30000	.05%+-1cnt

ORDERING GUIDE

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



Ordering Example: wMPC400/BM14/5 -- Wall mount, Four Zone Controller with J,K,T & E Thermocouple, 4-20ma and 0-10vdc inputs and 120vac Power.