

## Digi-Sense Temperature Controller

- Direct Plug-In of Heating Devices
- Adjustable Over-Temperature and Loop Break Cut-Off Give Fail-Safe Operation
- 2 Control Modes: ON/OFF or PID
- PID Parameters can be Entered Manually or Automatically Using the "Autotune" Feature
- Field Calibration Offset Compensates for Probe Error
- Deluxe Model Features Ramp & Soak Profiles and RS-232 Communications for Computer Control of System Parameters, Software Included



These Digi-Sense temperature controllers can be used for a wide variety of temperature control applications. Choose from standard or deluxe models. Both controller models provide excellent control accuracy and power capabilities, making them ideal for pilot process plants, R & D labs or OEM requirements.

Both controller models accept: J, K, T, E, N, B, R or S thermocouple types with miniconnectors. Deluxe models also accept 400 & 700 series thermistor probes with ¼" phono plug or RTD probes with 3-pin connectors.

### Specifications

Input Type	Range	Resolution	Accuracy
E:	-328 to 1832°F -200 to 1000°C	0.1° 1° above 999.9°	type J, K, T, E and N above -100°C (-248°F): ±0.1% rdg, and ±0.4°C (±0.7°F) below -100°C (-248°F): ±0.1% rdg, and ±1°C (±1.8°F)
J:	-374 to 1832°F -190 to 1000°C		
K:	-328 to 2502°F -200 to 1372°C		
N:	-328 to 2372°F -200 to 1300°C		
T:	-328 to 752°F -190 to 400°C		
B:	392 to 3272°F 200 to 1800°C		
R:	32 to 3214°F 0 to 1768°C		
S:	32 to 3214°F 0 to 1768°C		
400 Series Thermistor*	32 to 212°F 0 to 100°C		
700 Series Thermistor*	32 to 212°F -0 to 10000°C		
100Ω Pt RTD*	328 to 1562°F -200 to 850°C	type R, S and B ±0.1% rdg, and ±1°C (±1.8°F)	
		Thermistor and RTD ±0.1% rdg, and ±0.4°C (±0.7°F)	

### Specifications and Ordering Information

Mfg#	689-0000	689-0005	689-0010	689-0015
Controller Type	Standard		Deluxe	
Controller Output:	115 VAC, 10 A; 230 VAC, 10A		115 VAC, 15A; 230 VAC 15A	
Control Type:	On/Off, Programmable PID, Autotune PID			
Ramp/Soak:	No		Yes; 16 Segments	
RS-232:	No		Yes; 300-9600 baud	
Recorder Output:	None		4-20/20-4 mA, selectable	
Power (50/60 HZ)	115 VAC, 230 VAC			
Order #	MP689-0000	MP689-0005	MP689-0010	MP689-0015
Price				

### Ordering Information

Order #	Mfg #	Description	Price
MP89000-50	89000-50	Panel Mount Kit	
Transcat Accredited Calibration with Data			CALL

**Order Probes Separately  
See Page G28, G30 and G34**

Temperature Test Instruments

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