

STP Low Cost Programmable Digital Thermostat

The compact STP digital controller is an easy-to-use, low-cost thermostat which can accept Type K and J Thermocouples, 2 or 3 wire RTD sensors and 4~20mA inputs. Suitable for heating and cooling applications. A cost-effective solution for simple control and monitoring applications.

- Universal inputs (Thermocouple, Pt100, 4~20mA)
- Bright LED display
- Compact size (75mm x 33mm x 70mm)
- Basic on/off control with programmable hysteresis
- Simple to use, easy to configure



Rear View



Technical Details	
Input(s)	Thermocouple Type K, J (-30°C to +999°C) 2 or 3 wire Pt100 (-199°C to +654°C) 4~20mA (-199 to +999) (requires a 250 ohm resistor fitted between input terminals)
Display	3-digit LED
Control Method	On / Off
Control Output	Relay (15A/250V) or Solid State Relay
Alarm Output	Relay (3A/250V)
Accuracy	0.5% FS
Sampling Time	0.5 seconds
Working Environment	0 to +50°C, less than 80% RH (non-condensing)
Power Supply	110~240 V AC or 21~30 V AC/DC
Dimensions	75mm (W) x 33mm (H) x 70mm (D)
Mounting / Cutout Dimensions	Panel-mounted with drilling template 71mm x 29mm

Control Output	Alarm Output	Power Supply	Order Code
Relay (15A/250V)	-	110/240 V AC	STP321
Relay (15A/250V)	One Relay Alarm (3A/250V)	110/240 V AC	STP322
Solid State Relay	-	110/240 V AC	STP321S
Solid State Relay	One Relay Alarm (3A/250V)	110/240 V AC	STP322S
Relay (15A/250V)	-	21-30 V AC/DC	STP321A
Relay (15A/250V)	One Relay Alarm (3A/250V)	21-30 V AC/DC	STP322A
Solid State Relay	-	21-30 V AC/DC	STP321SA
Solid State Relay	One Relay Alarm (3A/250V)	21-30 V AC/DC	STP322SA

DTM-995B LCD Thermocouple Indicator

The DTM-995B is compatible with K, J and T type thermocouples. It can measure between -200°C and +1300°C (-328°F to +1999°F) when using an appropriate thermocouple.

The current value and maximum/minimum values since power-on are recorded, which can be recalled and displayed by using an external push button connected to the meter. Calibration can be performed easily using two potentiometers located on the rear of the meter. Cold-junction compensation is used to maintain accuracy when the meter is exposed to changes in temperature.

The meter is housed in a robust carrier, which can be bolted in place or panel mounted using the low profile bezel, window and clips provided. Backlighting is included for use in poor lighting conditions.



Rear View



- Measures temperature from a K, J or T type thermocouple
- -200°C to +1300°C (-328°F to +1999°F) range
- Displays current, highest and lowest readings
- 19mm (0.75") digit height
- Screw terminal connections

Technical Details		
Accuracy (excluding probe)		1°C (2°F) Typical
Thermocouple Measurement Range	Type K Thermocouple	-200°C to +1300°C (-328°F to +1999°F)
	Type J Thermocouple	-130°C to +900°C (-202°F to +1652°F)
	Type T Thermocouple	-200°C to +350°C (-328°F to +662°F)
Supply voltage (normal operation)		7.5 V d.c. (Min), 30 V d.c. (Max)
Supply voltage (5V mode) *		4.75 V d.c. (Min), 5 V d.c. (Typical), 5.25 V d.c. (Max)
Backlight voltage **		4.75 V d.c. (Min), 5 V d.c. (Typical), 5.25 V d.c. (Max)
Supply current		6mA (at 30V) Min, 13mA (at 5V) Max
Supply current with backlighting **		20mA (at 30V) Min, 50mA (at 5V) Max
Operating Temperature Range		0°C to +50°C (+32°F to +122°F)
Temperature Stability		0.05°C (0.1°F)
Dimensions (panel cut-out 72mm x 40mm, 3mm max panel thickness)		72.5mm (W) x 40.5mm (H) x 22.5mm (D) (bezel 76mm x 44mm)

* A 5V mode is available by moving DIP switch 2 to the 'on' position. Inputting a voltage larger than 5V in this mode may cause permanent damage to the meter.

** Backlighting can be run off the internal voltage regulator by moving DIP switch 1 to the 'on' position. Using backlighting in this way will cause some self-heating of the meter. This can be calibrated out during initial setup, however the final application will need to continue using the backlighting to maintain the calibration.

Order Code

DTM-995B

