

**New Digital Temperature Controllers**



9400 dual-display



3300 controller



9300 controller

**Shared Features of the 9400, 3300 & 9300 controllers**

- Full PID autotuning temperature controllers
- Bright LED displays
- Dual-outputs
- Alarms with 5 options
- PID heat-cool operation
- Ramp & soak operation
- Sleeve mounting for easy maintenance
- IP66 protection from front panel
- CE, UL & CSA approvals
- 3-year warranty
- Charting and logging software option
- RS232/485 Modbus option

**9400 dual-display**

1/16<sup>th</sup> DIN 48 x 48mm

Set-point and process temperatures shown.

**Options:**

ssd & relay as standard

9411 - 2 x relay

9422 - 2 x ssd

RS232 module

RS485 module

**3300 controller**

1/32<sup>nd</sup> DIN 24 x 48mm

**Options:**

ssd & relay as standard

3311 - 2 x relay

3322 - 2 x ssd

12-24V on 3300 & 3322

RS232 module

RS485 module

**9300 controller**

1/16<sup>th</sup> DIN 48 x 48mm

**Options:**

ssd & relay as standard

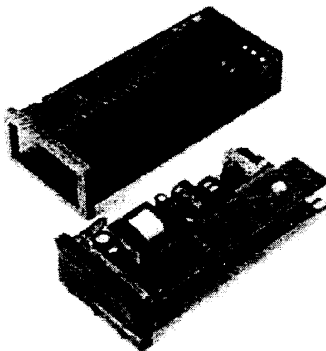
9311 - 2 x relay

9322 - 2 x ssd

12-24V on 9300 & 9322

RS232 module

RS485 module



3300 with comms module fitted



[download technical manual](#)

**Specifications (for all 3300, 9300 & 9400 products)**

**Thermocouple**

9 types

Standards: IPTS/68/DIN 43710

CJC rejection: 20:1 (0.05°/°C) typical

External resistance: 100W maximum

Resistance thermometer

RTD-2/Pt100 2 wire

Standards: DIN 43760

(100W 0°C/138.5W 100°C Pt)

Bulb current: 0.2mA maximum

Linear process inputs

mV range: 0 to 50mV

Applicable to all inputs SM = sensor maximum

Calibration accuracy:  $\pm 0.25\%SM \pm 1^\circ C$

Sampling frequency: input 10Hz, CJC 2 sec.

Common mode rejection: Negligible effect up to 140dB, 240V, 50-60Hz

Series mode rejection: 60dB, 50-60Hz

Temperature coefficient: 150ppm/°C SM

Reference conditions: 22°C  $\pm 2^\circ C$ , rated voltage after 15 minutes settling time.

**Output devices**

SSd/SSd1/SSd2: solid state relay driver: To switch a remote SSR 5Vdc  $\pm 0/-15\%$  15mA non-isolated

Miniature power relay: form A/SPST contacts (AgCdO) rLY and rLY1: 2A/250ac resistive load

rLY2: 1A/250ac resistive load

**General**

Displays: Upper, 4 Digits, high brightness green LED. 10mm (0.4") high.

Lower, 4 Digits, Orange LED. 9mm (0.35") high (9400 only)

Digital range -199 to 9999

Hi-res mode -199.9 to 999.9

LED output indicators - flashing SP1 square, green; SP2 round, red

Keypad: 3 elastomeric buttons

**Environmental**

Humidity: Max 80%

Altitude: up to 2000M

Installation: Categories II and III

Pollution: Degree II

Protection: NEMA 4X, IP66

EMC emission: EN50081-1 FCC Rules 15 subpart J

Class A

EMC immunity: EN50082-2

Ambient: 0-50°C (32-130°F)

Mouldings: flame retardant polycarbonate

Weight: 130g (4.2 oz)