The Series SCD-8 Multi-Loop DIN Rail Mount Temperature Controller can be used to control up to 8 independent PID control circuits. The base unit comes standard with 4 thermocouple or 3 RTD input channels. Additional input cards can be purchased if needed, but the additional inputs must be of the same type as the inputs that came with the base unit. If more than 8 loops are required or to mix input types, SCD-2000 slave modules can be added without wiring additional power or communications cables. Each loop can be programmed either through the standard RS-485 serial communications or an optional plug in LED display module.

Each control loop will have two outputs and a single input. The outputs can be configured in LED display module.

For Factory Configured Models, Relay Outputs are standard on Alarm Output Sub1 Options

### Input Selection

- **Construction**
  - Thermostatic Controls
  - Temperature measurement
  - Platinum resistance (Pt100)
  - Platinum resistance (Pt50)
  - Thermocouple (K type)
  - Thermocouple (J type)
  - Thermocouple (T type)
  - Thermocouple (E type)
  - Thermocouple (N type)
  - Thermocouple (R type)
  - Thermocouple (S type)
  - Thermocouple (B type)
  - Thermocouple (L type)
  - Thermocouple (U type)
  - Thermocouple (KX type)
  - Thermocouple (XX type)
  - Thermocouple (U type)
  - Thermocouple (L type)
  - Thermocouple (B type)
  - Thermocouple (S type)
  - Thermocouple (N type)
  - Thermocouple (E type)
  - Thermocouple (T type)
  - Thermocouple (K type)

### Control Output Ratings

- **Relay output**
  - SPST, 3A @ 250 VAC resistive

- **Voltage pulse output**
  - 24 VDC max, 40 mA

- **Current output**
  - 4 to 20 mA (resistive load < 500 Ω) (output 1 or 2 only)

 Memory Backup: Non-volatile memory.

### Operating Temperature

- 32 to 122°F (0 to 50°C)

### Accessories

- SCD-PS, 100 to 240 VAC/VDC to 24 VDC Power Supply
- SCD-LED, Optional LED Display Module
- A-600, R/C snubber
- MN-1, Mini-Node™ USB/RS-485 converter
- SCD-SW, Configuration Software
- 10 oz (425 g)

**Agency Approvals:** CE, RoHS, cUL, UL.

**Specifications:**

- **Input**
  - Thermocouple: RTD (depending on model; see chart).

- **Display**
  - Optional, single row 7 segment LED display, 4 bit PV = Red, SV = Green.

- **Supply Voltage:** 24 VDC, isolated switching power supply.

- **Power Consumption:** 10W + (3W x # of SCD-2000 modules).

- **Operating Temperature:** 32 to 122°F (0 to 50°C).

- **Memory Backup:** Non-volatile memory.

- **Control Output Ratings:**
  - Relay output: SPST, 3A @ 250 VAC resistive;
  - Voltage pulse output: 24 VDC max, 40 mA;
  - Current output: 4 to 20 mA (resistive load < 500 Ω) (output 1 or 2 only);
  - Linear voltage: 0 to 10 VDC (resistive load > 1000 Ω) (output 1 or 2 only);

- **Communications:** RS-485 Modbus®-A-5-11/RTU communication protocol.

- **Weight:** 10 oz (425 g).

- **Agency Approvals:** CE, RoHS, cUL, UL.

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**Input Sensor Types**

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<tr>
<th>Input Sensor Types</th>
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**Note:** The default setting in SCD-8000 is "thermocouple K type". The default setting in SCD-8100 is "Pt100".