**Multi-Loop DIN Rail Mount Temperature Controller**

**Up to 8 Control Loops, Optional Display**

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 for dual loop control or for a control loop and an alarm. One of the two outputs for each control loop must be a relay or pulsed voltage output.

**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:**
  - Relayoutput: SPST, 3A @ 250VAC resistive; Voltage pulse: Output: 24 VDC max, 40 mA;
  - Current output: 4 to 20 mA (resistive load < 500Ω) (output 1 or 2 only);
  - Linear voltage: 0 to 10 VDC (resistive load > 1000Ω) (output 1 or 2 only).
- **Communications:** RS-485 Modbus® A-5-11/RTU communication protocol.
- **Weight:** 10 oz (425 g).
- **Agency Approvals:** CE, UL.
- **Front Panel Rating:** NEMA 4X (IP66).

**ACCESSORIES**

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

For Factory Configured Models, Relay Outputs are standard on Output Sub1 and Sub2 if 8 inputs selected.

**Example**

<table>
<thead>
<tr>
<th>Construction</th>
<th>SCDM-8</th>
<th>SCDM-8XX-X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Selection</td>
<td>0 1 2 3</td>
<td>4 Thermocouple Inputs 3 RTD Inputs 8 Thermocouple Inputs 6 RTD Inputs</td>
</tr>
<tr>
<td>Output 1 Card Selection</td>
<td>0 1 2 3 5 6</td>
<td>None  Pulsed Voltage  Relay  Current  Linear Voltage</td>
</tr>
<tr>
<td>Output 2 Card Selection</td>
<td>0 1 2 3 5 6</td>
<td>None  Pulsed Voltage  Relay  Current  Linear Voltage</td>
</tr>
<tr>
<td>Options</td>
<td>LED PV LED Display Pulsed Voltage on Alarm Output Sub 1 &amp; Sub 2</td>
<td></td>
</tr>
</tbody>
</table>

**Temperature Process Controllers**

**Series SCD-8**

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