**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.

### Base Units

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCD-8000</td>
<td>Thermocouple</td>
</tr>
<tr>
<td>SCD-8100</td>
<td>RTD</td>
</tr>
</tbody>
</table>

### Input/Output Modules

<table>
<thead>
<tr>
<th>Model</th>
<th>Input/Output Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCD-4T</td>
<td>4 Thermocouple Inputs</td>
</tr>
<tr>
<td>SCD-3R</td>
<td>3 RTD Inputs</td>
</tr>
<tr>
<td>SCD-42</td>
<td>4 Pulse Voltage Outputs</td>
</tr>
<tr>
<td>SCD-43</td>
<td>4 Relay Outputs</td>
</tr>
<tr>
<td>SCD-45</td>
<td>4 Current Outputs</td>
</tr>
<tr>
<td>SCD-46</td>
<td>4 Linear Voltage Outputs</td>
</tr>
</tbody>
</table>

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

### 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, UL.
- **Front Panel Rating**: NEMA 4X (IP66).

### ACCESSORIES

- SCD-PS, DIN Rail Mount 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

See Series SCD on page 271 for slave modules.

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**Note**: The default setting in SCD-8000 is "thermocouple K type". The default setting in SCD-8100 is "Pt100".

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