Series SCD-8

Multi-Loop DIN Rail Mount Temperature Controller
Up to 8 Control Loops, Optional Display

Shown with optional display and additional inputs and outputs.
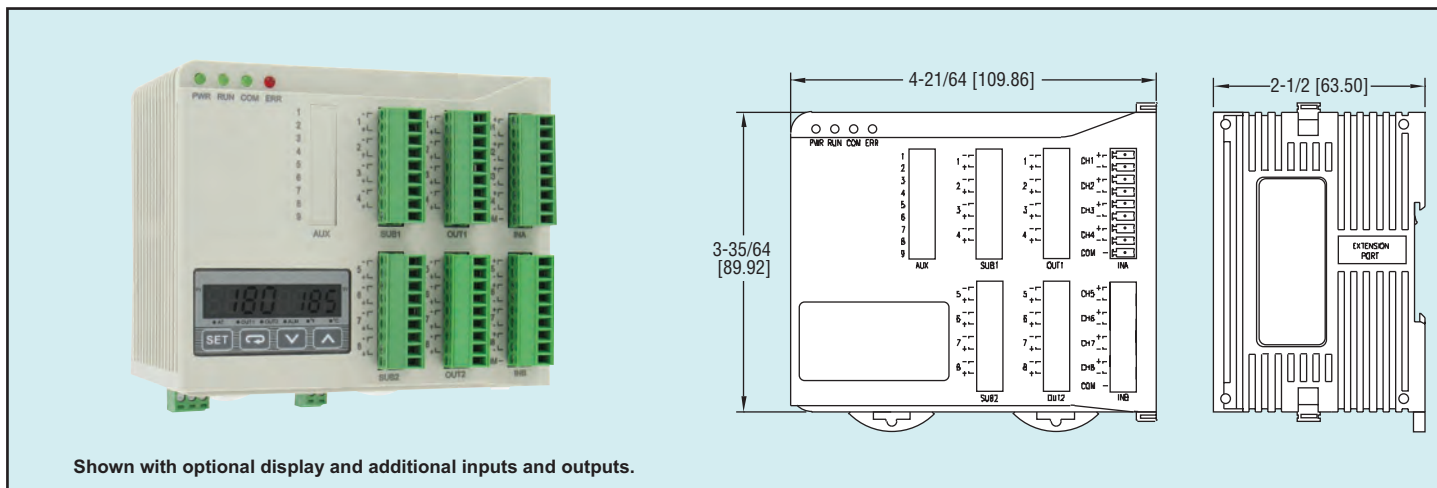
The Series SCD-8 Multi-Loop DIN Rail Mount Temperature Controller can be used to control up to 8 independent PID control circuits. The base unit comes standard with 4 thermocouple or 3 RTD input channels. Additional input cards can be purchased if needed, but the additional inputs must be of the same 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

Model	Input Type
SCD-8000	Thermocouple
SCD-8100	RTD

Input/Output Modules

Model	Input/Output Type
SCD-4T	4 Thermocouple Inputs
SCD-3R	3 RTD Inputs
SCD-42	4 Pulse Voltage Outputs
SCD-43	4 Relay Outputs
SCD-45	4 Current Outputs
SCD-46	4 Linear Voltage Outputs

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

Example	SCDM-8	X	X	X	X	SCDM-8XXX-X
Construction	SCDM-8					Multi-Loop DIN Rail Mount Temperature Controller
Input Selection		0				4 Thermocouple Inputs
		1				3 RTD Inputs
		2				8 Thermocouple Inputs
		3				6 RTD Inputs
Output 1 Card Selection			0			None
			2			Pulsed Voltage
			3			Relay
			5			Current
			6			Linear Voltage
Output 2 Card Selection				0		None
				2		Pulsed Voltage
				3		Relay
				5		Current
				6		Linear Voltage
Options					LED	LED Display
					PV	Pulsed Voltage on Alarm Output Sub 1 & Sub 2

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, 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

See Series SCD on page 267 for slave modules.

Input Sensor Types	Range
SCD-8100/SCD-3R	
Temperature measurement resistance (Cu50)	-50 to 150°C
Platinum resistance (Pt100)	-200 to 600°C
Platinum resistance (JPt100)	-20 to 400°C
SCD-8000/SCD-4T	
Thermocouple TXK type	-200 to 800°C
Thermocouple U type	-200 to 500°C
Thermocouple L type	-200 to 850°C
Thermocouple B type	100 to 1800°C
Thermocouple S type	0 to 1700°C
Thermocouple R type	0 to 1700°C
Thermocouple N type	-200 to 1300°C
Thermocouple E type	0 to 600°C
Thermocouple T type	-200 to 400°C
Thermocouple J type	-100 to 1200°C
Thermocouple K type	-200 to 1300°C

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

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