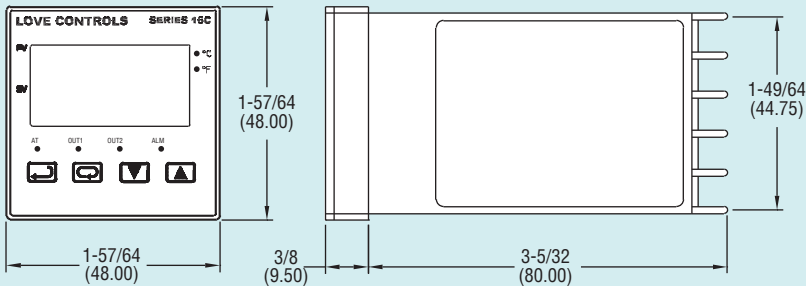




Series  
16C

# 1/ 16 DIN Temperature Controller

PID Control, Auto-Tuning, Dual Display, RS-485 Communication



Temperature

The compact Series 16C Temperature Controller offers accurate temperature measurement and control in a 1/16 DIN package. Designed for direct or reverse acting (cooling or heating) control, the Series 16C can be programmed for simple ON/OFF or more complex PID control functions. PID control is supported with manual or auto-tuning. Select relay, voltage or current output for control methods.

The Series 16C accepts a variety of thermocouple and RTD inputs. Process value and setpoint value are displayed simultaneously on the large dual LED. Auto-tuning, engineering units (°F or °C), and alarm status is also indicated on the faceplate. Two alarm outputs are included on the unit with 12 preprogrammed alarm functions.

### SPECIFICATIONS

- Inputs:** Thermocouple, RTD, see chart.
- Display:** Two 4-digit, 7 segment .25" H (6.35 mm) LED's. PV: red; SV: green.
- Accuracy:** ±0.25% span, ±1 least significant digit.
- Supply Voltage:** 100 to 240 VAC, 50/60 Hz.
- Power Consumption:** 5 VA max.
- Operating Temperature:** 32 to 122°F (0 to 50°C).
- Memory Backup:** Nonvolatile memory.
- Control Output Ratings:**
  - Relay: SPST, 5A @ 250 VAC resistive.
  - Voltage Pulse: 14V, 10% to -20% (max 40 mA).
  - Current: 4 to 20 mA.
- Communication:** RS-485 Modbus® Communication Protocol.
- Weight:** 4 oz (114 g).
- Agency Approvals:** CE, UL, cUL.
- Front Panel Rating:** IP66.

Input Types	Range
Pt100Ω RTD	32 to 212°F (0 to 100°C) -4 to 932°F (-20 to 500°C) -328 to 1112°F (-200 to 600°C)
T/C type B	212 to 3272°F (100 to 1800°C)
T/C type S	32 to 3092°F (0 to 1700°C)
T/C type R	32 to 3092°F (0 to 1700°C)
T/C type N	-328 to 2372°F (-200 to 1300°C)
T/C type E	32 to 1112°F (0 to 600°C)
T/C type T	-4 to 752°F (-20 to 400°C) -328 to 752°F (-200 to 400°C)
T/C type J	-4 to 752°F (-20 to 400°C) -148 to 1562°F (-100 to 850°C)
T/C type K	-328 to 2372°F (-200 to 1300°C) -328 to 932°F (-200 to 500°C)
T/C type L	-328 to 932°F (-200 to 500°C)
T/C type U	-328 to 1472°F (-200 to 800°C)

Model	Output
16C-2	Voltage Pulse
16C-3	Relay
16C-5	Current

### ACCESSORIES

- SCD-SW, Configuration Software
- MM-N1, Mini-Node™ USB/RS-485 converter