**Series SI Smart Indicator**

The Series SI Smart Indicator is fully programmable and accepts all commonly used temperature or process inputs. Programming is via the front panel keys following a logical menu structure which can be set to "short" (default) for common usage features or "full" where the full range of programmable features are available. The indicator can also be programmed via a PC using the RS-485 Modbus® communication module. Password protection can be enabled to prevent any unauthorized setting changes. The Series SI features a 4-digit red LED with selectable resolution. The display can be set to indicate a fixed number of decimal places or auto scale for maximum resolution. Optional interchangeable modules for relay, 4 to 20 mA retransmission, or Modbus® RS-485 serial communication output are easily installed without the need for dismantling or recalibration.

Model SI-13 Smart Indicator is designed to accept 2 or 3-wire Pt100Ω RTD or Types J, K, T, R, S, E, F, N, or custom thermocouple inputs. Temperature measurements can be displayed in selectable °F or °C. High/low scale burnout, input filtering or smoothing, and offset can be defined by the user. Select Model SI-23 Smart Indicator for process signal input. The indicator has an input type, range, engineering units, resolution, burnout condition, and filter time constant can be easily programmed.

**ACCESSORIES**

- **SI-02P, Dual Relay Output** (2 per unit max.) $123.00
- **SI-04P, 4 to 20 mA Retransmission** (1 per unit max.) $110.00
- **SI-05P, Modbus® Communication** (1 per unit max.) $137.00

**SPECIFICATIONS**

**GENERAL**
- **Input/Output Isolation**: 500 VAC
- **RMS (galvanically isolated)**.
- **Display Range**: -9999 to 9999.
- **Output Impedance**: 700Ω @ 25°C.
- **Power Supply**: 90 to 253 VAC @ 50/60 Hz.
- **Ambient Operating Temperature**: -22 to 140°F (-30 to 60°C).
- **Time Constant (Filter Off)**: 2 seconds, or adaptive.
- **Time Constant (Filter On)**: < 1 second (to 63% of final value).
- **Update Time**: 250 ms max.
- **Weight**: 2 lb (0.9 kg).
- **Agency Approvals**: CE.

**MODEL SI-13**
- **Thermocouple Input Range**: J: -328 to 2192°F (-200 to 1200°C); K: -328 to 2498°F (-200 to 1370°C); T: -328 to 752°F (-200 to 400°C); R and S: -14 to 3200°F (-10 to 1800°C); E: -328 to 1832°F (-200 to 1000°C); F: -148 to 1112°F (-100 to 600°C); N: -292 to 2372°F (-180 to 1300°C); custom: ±9999.
- **RTD Input Range**: Pt100Ω 2 or 3-wire: -328 to 1562°F (-200 to 850°C).
- **Accuracy**: T/C: ±0.04% full range input, ±0.04% rdg; RTD: ±0.01 full range input, ±0.05% of rdg.
- **Thermal Drift**: Zero: 0.05µV/°F (0.1µV/°C); Span: 50ppm/°F (100ppm/°C).

**MODEL SI-23**
- **Voltage Input Range**: 0 to 1 V, 1 to 5 V, 0 to 10 V.
- **Current Input Range**: 0 to 1 mA, 4 to 20 mA (active or passive).
- **Accuracy**: ±0.05% full-scale.
- **Thermal Drift**: Zero: 0.05µV/°F (0.1µV/°C); Span: 50ppm/°F (100ppm/°C).
- **Excitation**: 24V ±5% @ 50 mA.

**DUAL RELAY MODULE**
- **Contacts**: Two changeover relays, common wiper.
- **Electrical Rating**: AC: 253 V, DC: 125V.
- **Maximum Load**: AC: 7A @ 250V; DC: 7A @ 30V.
- **Maximum Power**: AC: 1750VA; DC: 210W.
- **Connections**: 5-way tension clamp connector.

**4 TO 20mA RETRANSMISSION MODULE**
- **Ranges**: 0 to 10 mA, 0 to 20 mA, 4 to 20 mA (active or passive).
- **Isolation**: 500 VAC.
- **Accuracy**: ±0.07% full scale.
- **Maximum Output Load**: Active: 1 KΩ; Passive: [(Vs-2)/20] KΩ.
- **Max. External Supply**: 30V (positive)
- **Connections**: 5-way tension clamp connector.

**RS-485 MODBUS® COMMUNICATION MODULE**
- **Isolation**: 500VAC.
- **Physical Layer**: 4-wire or 2-wire half duplex RS-485.
- **Baud Rate**: 19,200 or 9,600.
- **Protocol**: Modbus® RTU format.
- **Maximum Fan Out**: 32 Units.
- **Connections**: 5-way tension clamp connector.

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