

SC-2124 Series

DYNALCO CONTROLS

24-Channel

Universal Scanner

The SC-2124™ Series are universal scanners for continuous monitoring of 24 channels of temperature, pressure, or any other analog signal. Modbus® communications is an option.

**2-Year
Warranty**



® Cl. I, Div. 2, Grp. A, B, C, D

The SC-2124™ microprocessor-based Universal Scanner continually checks temperature, pressure, or other analog signals and shows them on a large alphanumeric display.

This multi-informational display indicates both the value of each channel and any alarm conditions.

Custom-configurable screens allow specific channels to be displayed and parameters to be entered and updated.

Four relay outputs are used for alarm, shutdown, and user-defined functions. Class A, B, or C alarms and shutdowns are provided.

Modbus communication option allows for remote monitoring of all channels.



Universal inputs

- J, K thermocouple; or 2- or 3-wire RTD inputs (with SC-RTD option).
- 0–5 V inputs that represent temperature, pressure, or other physical parameters.
- 4–20 mA inputs.

Field-configuration

Using the front panel keypad the user can field-configure:

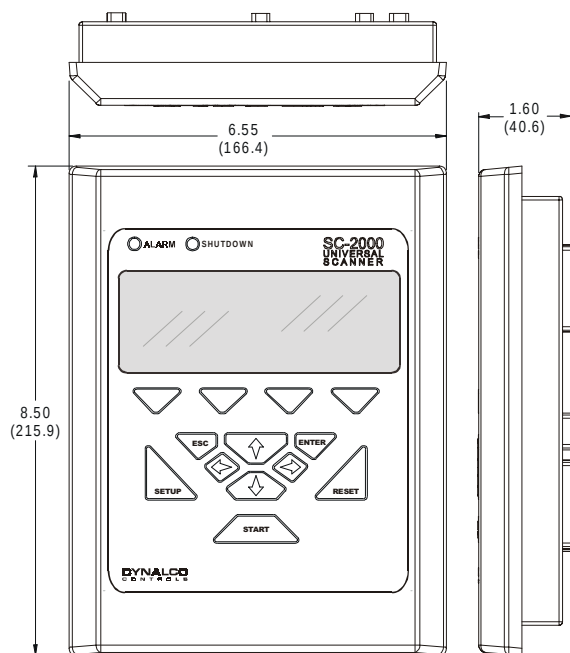
- Input types and units.
- Channel thresholds and trip classes.
- Relay operation modes.
- Remote displays.

A laptop computer can be used for faster field-configuration.

Remote displays

Up to eight Dynalco IDM-200™ universal indicator displays can be connected for constant display of specific scanner channels.

DIMENSIONS



FEATURES

- Microprocessor-based with communications for remote monitoring or laptop configuration.
- 24 universal analog input channels configurable for monitoring thermocouples, voltages, and 4–20 mA inputs.
- Class A, B, or C alarms and shutdowns.
- Open thermocouple detection.
- Wide DC power range (9–38 Vdc).
- Large 4-row by 20-character alphanumeric display shows status of all channels along with channel names.
- Remote display bus: up to eight IDM-200 displays for dedicated display of speed, hours, temperatures, and pressures.
- Ergonomic, sealed-membrane keypad with tactile feedback.
- Rugged, front-sealed enclosure.
- DB-style connectors for clean, reliable wiring.
- Password-protected setup mode.
- Modbus® communications available on the SC-2124M.
- CSA Class I, Div. 2, Groups A, B, C, & D.

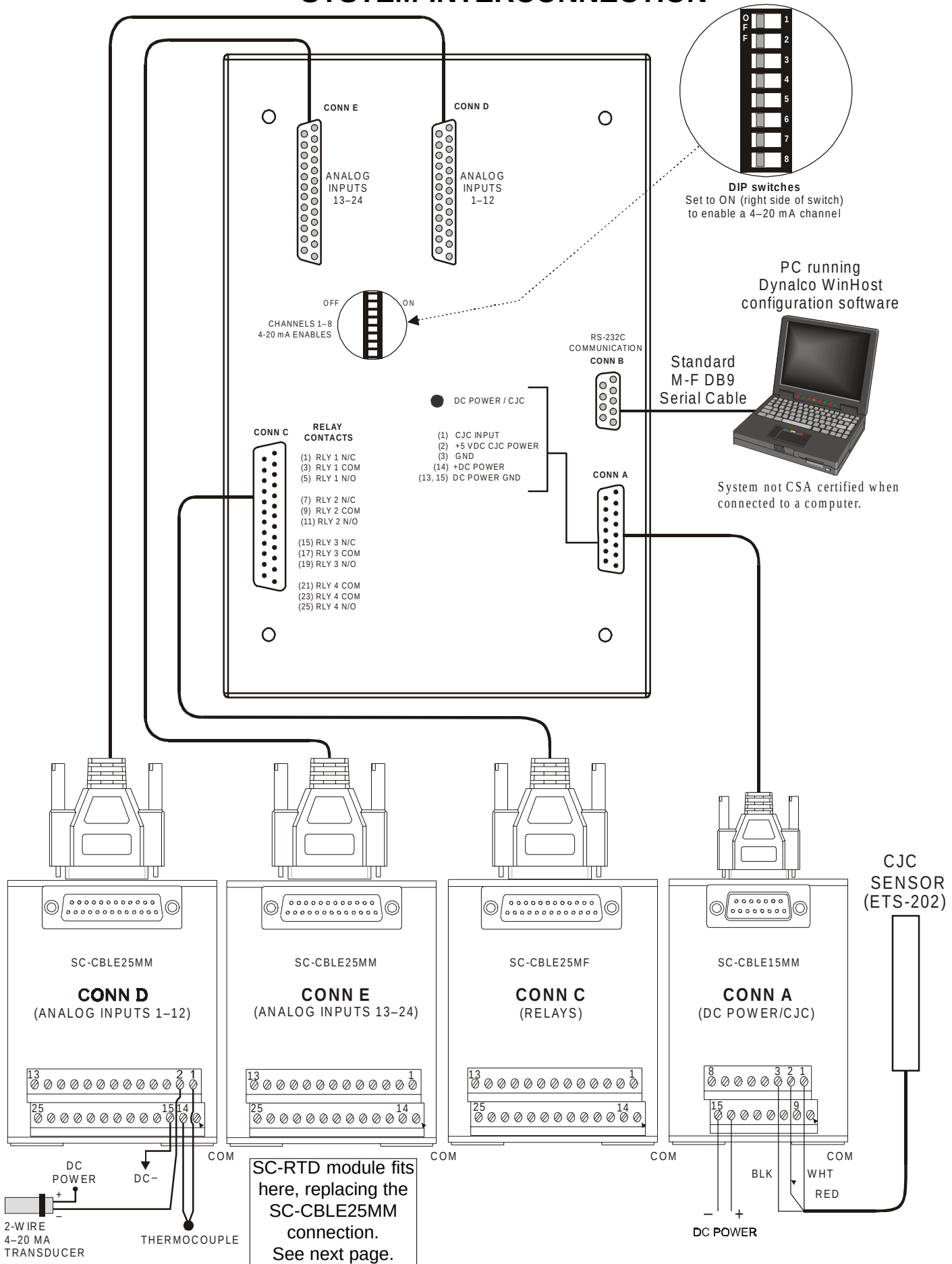
ACCESSORIES

- **SC-CBLE25MM:** 6 ft cable & terminal block for 12 inputs (2 required for 24 input system).
- **SC-CBLE25MF:** 6 ft cable & terminal block for relays.
- **SC-CBLE15MF:** 6 ft cable & terminal block for power, etc.
- **ETS-202:** Cold-junction compensation for thermocouples.
- **IDM-200:** 3³/₈ in. (~85.7 mm) diameter digital remote display.
- **SC-RTD:** Filtering and conditioning module to read up to 12 channels of 100W Pt or 120W Ni RTDs.

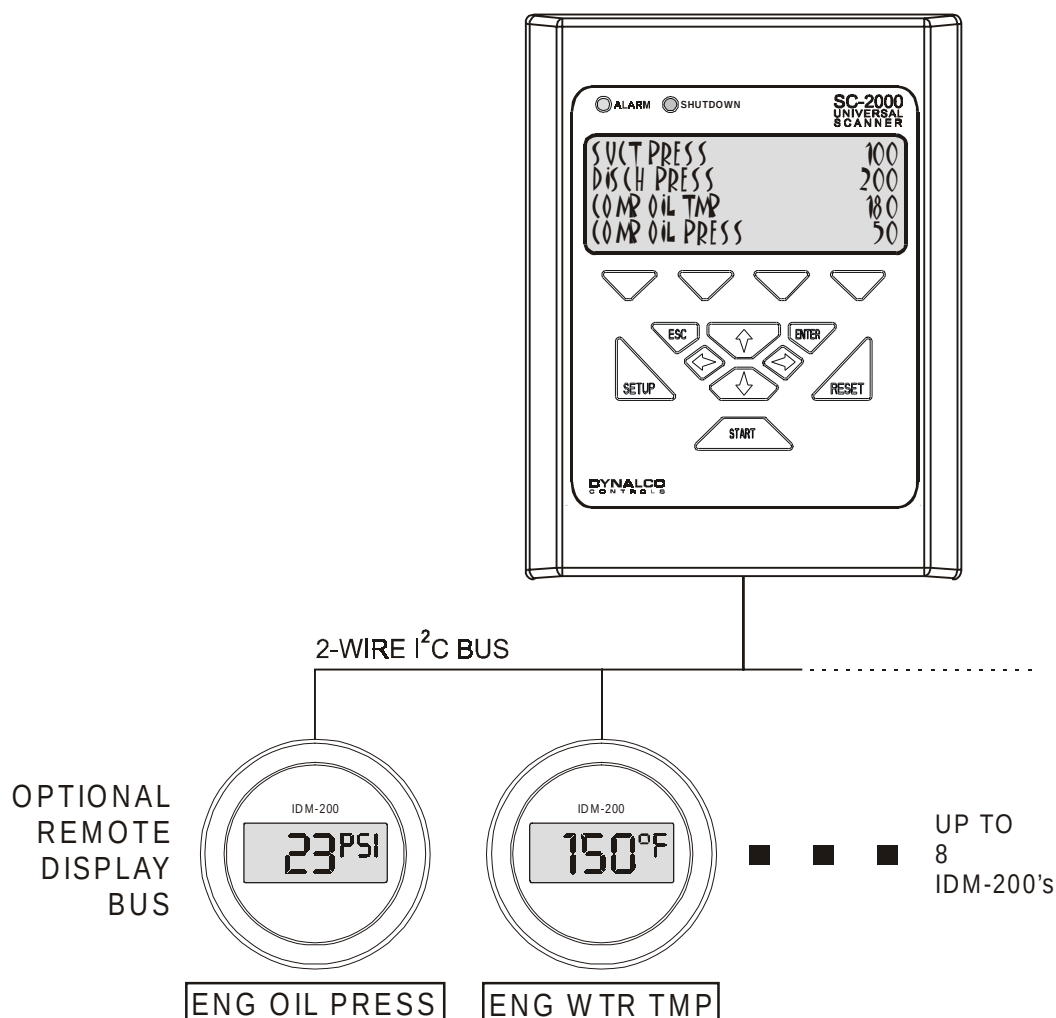
SPECIFICATIONS

Scan Rate	New channel every 50 milliseconds during operation
Input Channels	• 24 analog input channels fully configurable for: • J & K thermocouples • 0–5 V • 4–20 mA (8 on-board input resistors) • 100Ω Pt or 120Ω Ni RTDs using SC-RTD optional module • Accuracy: ±0.2%FS
Relay Outputs	• 4 relays; SPDT; rated 2.5amps @ 28 Vdc / 125 Vac
Input Power	• 9–38 Vdc, 0.45 amps maximum
Sensor Power	• +5 Vdc power for cold-junction temperature sensor, ETS-202
Display/Indicators	• Large 4X20 alphanumeric display • Dedicated alarm and shutdown LEDs • Backlit display
Communications	• RS-232C standard for laptop configuration using Dynalco WinHost software • Optional SC-2124M has Modbus RTU communications. (Configurable only via laptop PC)
Rear Connections	• All DB-style connectors on rear of unit • All field wiring is connected to DIN-RAIL mounted terminal blocks (optional)
Environmental	• Operating: –4°F to +176°F (–20° to +80°C) • NEMA 4 sealed enclosure

SYSTEM INTERCONNECTION



REMOTE DISPLAY OPTION



Using the optional IDM-200, the Remote Display Bus can be used to provide a dedicated display of any channel.

The main display on the SC-2124 can be in any mode (custom screen, scanning, etc.),

but each IDM-200 will only display its selected channel.

An address switch on the rear of the IDM-200 is used to identify each display to the SC-2124.

SC-RTD Module (option)

Supports up to twelve 2- or 3-wire RTDs channels. Either 100W Pt or 120W Ni.

Note: Six channels can be bypassed for use as J or K thermocouple inputs; or 0–5 V or 4–20 mA inputs.



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