Dwyer Series 1300 Smart Indicators/Transmitters are extremely versatile digital process controls, ideal for use with Dwyer pressure, temperature and flow sensors. Microprocessor based, all models are fully programmable and accept common thermocouple, RTD, current or voltage inputs. An integral 20VDC power supply suitable for powering all Dwyer 2-wire transmitters is standard. Bright LED display automatically indicates temperature range in °F (°C) based on selected thermocouple or RTD input. For flow monitoring or control with Dwyer differential pressure transmitters, a preprogrammed SQRT function may be selected to display actual engineering units in CFM, GPM, etc. In addition, a user defined linearization table is provided for non-linear functions, i.e., liquid level indication in a side mounted cylindrical tank. Four independent alarm status LED displays are fully programmable to indicate process condition at a glance.

The Series 1300 is available with a variety of output options including multiple alarm relays, analog retransmission (current), bridge excitation (voltage) and serial communications. Alarms are fully programmable: Hi, low, deviation, deadband, time delay, manual or automatic reset, NO or NC operation. Contacts rated 8A max., 100 mA min., 0 mA min. @ 240 VAC (< 100 mA switching current may require removal of factory wired varistors across relay contacts) and 8A max. @ 30 VDC.

Current Retransmission Output: Spannable 4-20 mA, 0-20 mA or 0-10 mA; 0 mA min. 22 mA max.; Loop resistance: 0-700 Ω (integral loop powered), 0-1000 Ω (externally powered 10-30 VDC).

Integral Power Supply (for 4-20mA, 2-wire transmitter input): 20VDC, 50 Ω input impedance.

Power Requirements: 120 VAC, 50/60 Hz (as stocked); field configurable 240 VAC 50/60 Hz.

Accuracy (@ 20°C): Thermocouple input ±1°C Cold Junction Error ±1°C (J, K, T type), ±2°C (R, S, E, F, N type) or ±3°C (B type); RTD input ±0.1% of reading ±0.1°C; Current input ±0.1% full span; Voltage input ±0.02% full span (0.1, 1, 10 volts), ±0.04% full span (1-5 volts).

Displays: 5 digit, 7 segment 14 mm (0.5˝) high LED display; Four independent alarm status LED indicators; 3.3 Hz update rate.

Display Resolution: User-adjustable.

Memory Backup: Nonvolatile memory.

Serial Communications: Optional RS485.

Operating Temperature: 10 to 40°C (Linearized and cold junction compensated).

Electrical Connections: Removable terminal blocks for ease of wiring.

Isolation: Power Supply to 1.5kV; Inputs to 500V; Relay Outputs to 500V; Current Retransmission Output to 500V (typical).

Weight: 1 lb, 14 oz (850 g).

Options: 24VAC 60/60 Hz Supply Voltage; SPDT Relay Output; Programmable 2-20VDC or Constant 24VDC Outputs; RS485 Serial Communications.

Agency Approvals: CE.

Suggested Specification
Indicator/Transmitter shall be 1/8 DIN with front panel sealed to IP65, NEMA 4. Process indication shall be 5 digit LED display with 4 independent LED alarm status displays. Programmable inputs shall include thermocouples, RTD’s, current or voltage. Outputs shall be (____). Indicator/Transmitter shall be Dwyer Model 13____.

### MODELS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Output 1</th>
<th>Output 2</th>
<th>Comm.</th>
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<tbody>
<tr>
<td>13000</td>
<td>None</td>
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<td>13020</td>
<td>DPST Relay</td>
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<td>Retransmission</td>
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<td>13024</td>
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