



Features

- 30-segment, 1/8 DIN size bar graph display
- Moving dot or accumulating bar format.
- Accepts 4-20 mA, 0-20 mA, 0-10 mA, 1-5 V, 0-10 V, or -5 to +5V
- 85-264 Vac universal AC power, optional 11-30 Vdc power.
- 15V, 30 mA transducer excitation output.
- Detachable screw terminals.
- High noise immunity
- Red or green LEDs.
- Horizontal or vertical format.
- Dual 5A, 250 Vac relays for alarm or control (optional)

Description

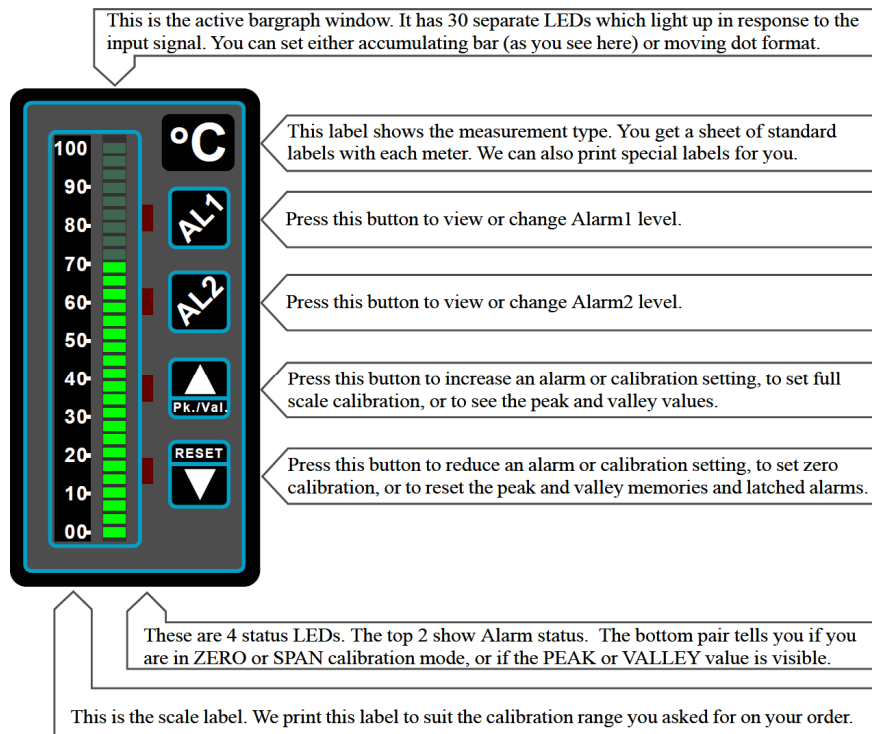
Compact, economical & versatile. Laurel's BAR Series Bar Graph Process Displays utilize a 1/8 DIN case like most digital panel meters and fit in the same 1/8 DIN size panel cutout.

The bar graph is made of 30 LED elements, which can be red or green. The display can be set up with a moving dot, for example for position monitoring, or in the traditional accumulating bar format, for example to indicate tank level. Please contact Laurel Electronics for special scales for horizontally mounted displays.

Transducer excitation standard. A 15 Vdc, 30 mA transducer excitation output is standard and can eliminate the need for an external power supply.

Optional Alarms. Two 5A, 250 Vac relay outputs are optional for alarm or setpoint control. The alarms have a failsafe (de-energize on trip) changeover output and an LED to show relay status. The alarms are supplied in HI-LO format, but can easily be altered to HI-HI or LO-LO. There's also a "pump-control" mode, where the low alarm will latch, and will only reset when the input exceeds the high alarm limit.

Designed for industrial environments. These bargraph displays are highly immune to electromagnetic interference. The front panel is environmentally sealed to IP54 (NEMA-12). Laurel's Model IPC splashproof cover can extend protection to IP65 (NEMA-4). Signal connections are via detachable screw terminal connectors.



Vertically oriented bar graph meter with optional dual relays



Specifications

Signal	
Input ranges	4-20 mA, 0-20 mA, 0-10 mA, 1-5V, 0-10V, -5 to +5V Specified at the time or order
Accuracy	
Accuracy at 25°C Resolution Temperature coefficient Warm-up time CMRR NMRR	0.5% of range ± 1 segment 1 part in 30 100 ppm / °C 1 minute 70 dB, DC to 450 Hz 55 dB, 50 or 60 Hz
Display	
Format Color Scale length	30 LED segments with power-on indicator Red or green 75 mm (3.0")
Alarm Outputs (optional)	
Format Annunciation Output Hysteresis	HI-LO (default), HI-HI, LO-LO, or pump control Red LED illuminates when relay de-energizes Changeover, Form C, rated 5 A, 250 Vac, resistive ±1% of range
Power Supply	
Voltage options Power consumption	110 Vac, 230 Vac, 24 Vac, 48 Vac, 5 Vdc, 11-30 Vdc 3 W typ.
Excitation Output	
Voltage Current Accuracy	15 Vdc 30 mA (current limited) ±20%
Mechanical	
Bezel dimensions Panel cutout Depth behind panel Width behind panel Weight	48 x 96 mm (1.89" x 3.78"), H x W 45 x 92 mm (1.77" x 3.62"), H x 125 mm (4.92"), including connectors 110 mm (4.33") 300 g (11 oz)
Environmental	
Operating Temperature Storage Temperature Relative Humidity Case material Protection	0°C to 50°C (32°F to 122°F) -40°C to 85°C (-40°F to 185°F) 0-85% RH, non-condensing 94V-1, UL rated Noryl NEMA-12 (IP54) when panel mounted NEMA-4 (IP65) with optional IPC Splashproof cover

Ordering Guide

Create a model a model number in this format: **BAR1000P, BOX1**

Display Type	BAR	Series Bargraph Display.
Display Color	1	Green LEDs
	2	Red LEDs
Power	0	95 to 264 Vac
	1	11 to 30 Vdc
Relay Output	0	None
	1	Two 5A Contact Relays
Format	0	Vertical Format
	1	Horizontal Format
Signal Input	Process Signals (e.g., 4-20 mA, 0-5 V, etc.)	
	P	Field Scalable. Default scaling is 4-20 mA = 0-100%
	P1	Specify min input, min reading; max input, max reading. 15 Vdc excitation.
Add-on Options	IPC	Clear front panel cover sealed to NEMA 4X / IP65
	BOX1	NEMA-4X wall-mount enclosure with 1/8 DIN cutout
	BOX2	BOX1 plus IPC