



Technology Solutions

TEK-LCD 7805A

NEMA 4X Large Display Loop-Powered Indicator



INDICATOR/
CONTROLLER

www.tek-trol.com

Introduction

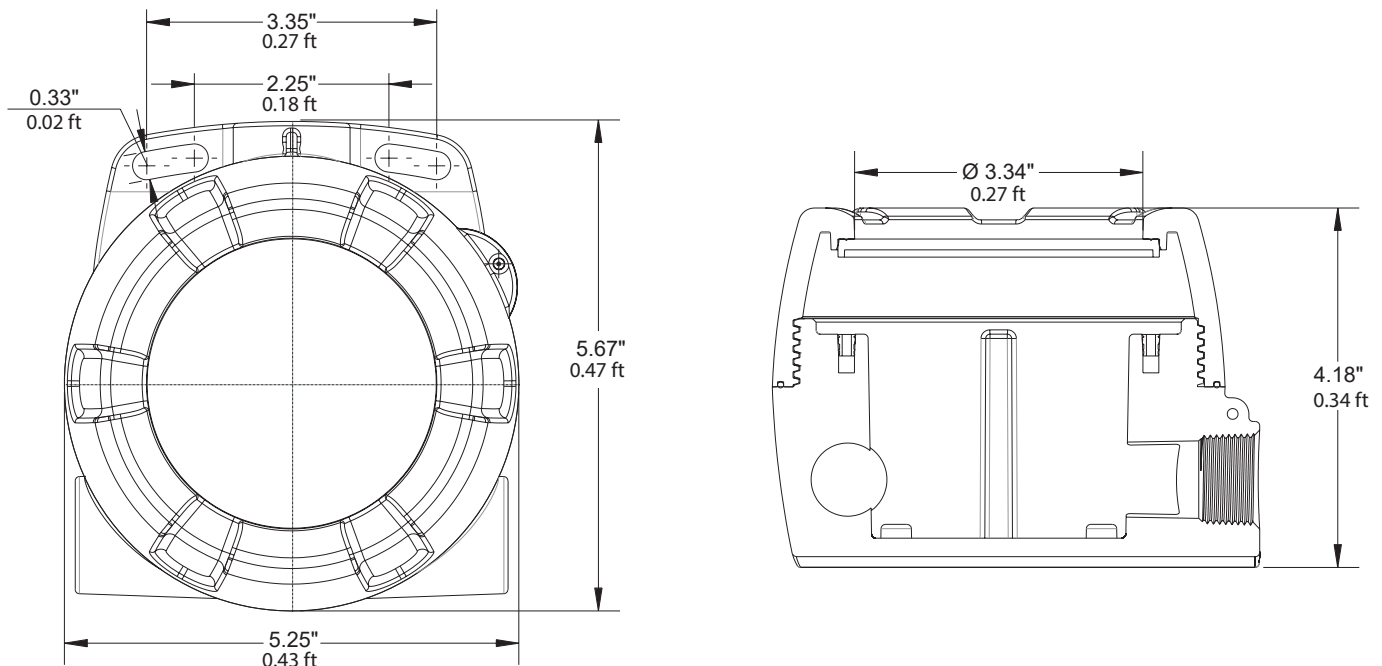
The Tek-LCD 7805A NEMA 4X Large Display Loop-Powered Indicator

The Tek-LCD 7805A is a plastic, loop-powered process meter with 1" display digits in a field-mountable enclosure designed for demanding applications. The meter derives all of its power from the 4-20 mA loop with a small 1 V drop, so there is no need to run additional, costly power lines. The Tek-LCD 7805A is built in a NEMA 4X and IP65 rated plastic enclosure which can stand up to even the harshest environmental conditions. It is programmed using four easy-to-access, front-mounted control dials.

Features

- 4-20 mA Input
- Modern, Sleek and Practical Enclosure for Safe Areas
- 3½ Digits, 1" (0.08 ft) Display
- Display Mountable at 0, 90, 180, & 270 Degrees.
- Easy Calibration and Installation
- Loop-Powered Backlight Option
- 1 V Drop (4 V with Backlight)
- Plastic NEMA 4X, IP65 Enclosure
- Flanges for Wall or Pipe Mounting
- HART Protocol Transparent
- Operates from -40 °C to 75 °C

Dimensional Drawings



Specifications

General

Display	3½ digit LCD, 1" (0.08 ft); -1,999 to 1,999
Display Update Rate	2.5 Updates/Second
Display Orientation	Display may be mounted at 90° increments up to 270° from default orientation
Externally Powered Backlight	Voltage Range: 9-36 VDC
Display Orientation	Display may be mounted at 90° increments up to 270° from default orientation
Over Range	Display reads 1 on the left most digit
Recalibration	Recommended at least every 12 months.
Programming Method	Four front mounted rotary control dials accessed when the cover is removed.
Normal Mode Rejection	60 dB rejection ratio
Operating Temperature Range	-40 °C to 75 °C
Storage Temperature Range	-40 °C to 75 °C
Relative Humidity	0 to 90% non-condensing
Connections	Screw terminals accept 12 to 22 AWG wire
Enclosure	NEMA 4X, IP65 plastic field enclosure. Color: grey. Material: Polycarbonate with UV Stabilizer. Three ¾" NPT threaded conduit Two ¾" NPT plastic conduit plugs, with 1.29" wrenching flats and a screwdriver slot, are included.
Mounting	May be mounted directly to conduit. Two slotted flanges for wall mounting or NPS 1½" to 2½" or DN 40 to 0.21 ft pipe mounting.
Overall Dimensions	5.67" x 5.25" x 4.18" (0.47 ft x 0.43 ft x 0.34 ft) (W x H x D)
Weight	1.65 lbs (26.4 oz, .75 kg)

Input

Input Range	4-20 mA
Accuracy	±0.1% of full span ±1 count
Temperature Drift	150 PPM/°C from -40 to 75°C ambient
Decimal Point	User selectable decimal point
Calibration Range	4 mA input: -1000 to +1000; 20 mA between 20 and 2000 counts greater than 4 mA display. Two point linear display span.
Maximum Voltage Drop	1 VDC @ 20 mA without backlight; 4 VDC @ 20 mA with loop-powered backlight.
HART Transparency	Analog input will not interfere with existing HART communications on the wired 4-20 mA signal
Loop-Powered Backlight Option	Factory installed only. Powered directly from the 4-20 mA loop, no batteries required. Backlight can be enabled or disabled via alternative wiring of terminal block. The display brightness will increase as the input signal current increases.
Input Overload	Over current protection to 2 A max.

Installation

All controls and wiring connectors are accessed by opening the enclosure. To access electrical connectors, remove the 2 captive screws and remove the display module from the enclosure.



Popular Models

Model Number	Description
7805A-0K0	NEMA 4X Large Display Loop-Powered Indicator

Accessories

Model Number	Description
7800A-6846	Steel Pipe Mounting Kit
7800A-6846SS	Stainless Steel Pipe Mounting Kit
7800A-PLUG75P	¾" NPT Plastic Conduit Plug

Customer Service and Support



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