



SD-50X

4-20mA Loop Powered Meter
5 Digit with 0.5" LCD
in a 1/8 DIN Ultra Short Depth Case

World's first 50,000 count, loop powered meter is incredibly easy to scale, from the front panel, to any desired engineering unit of measurement.



Touch-Pad
Standard

Push-Buttons
Optional



General Features

The SD-50X is the ultimate advancement in ease of use from the company that developed the worlds first 4-20 mA loop powered meters.

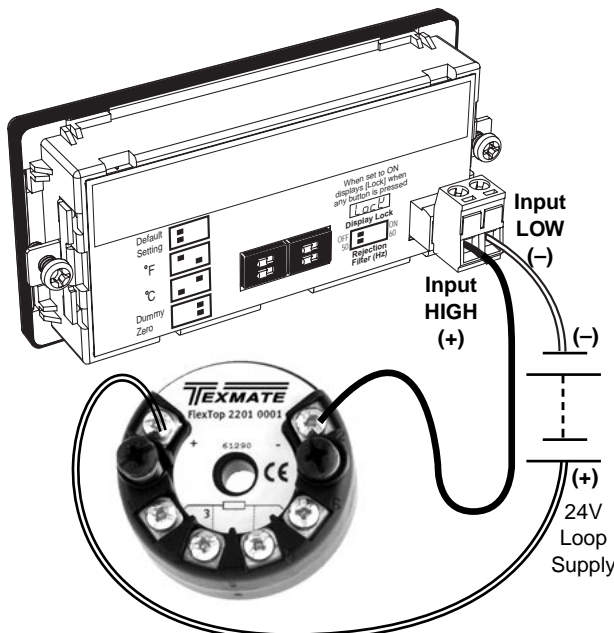
The SD-50X features lockable front panel scaling and calibration. Any 4 to 20 mA signal can be scaled from almost any two input values to display any required engineering unit of measure. A 4-20 mA input can display 50,000 counts of resolution from -19,999 to +30,000. The 6th digit can be selected to display °F, °C or an inactive extra zero from a dip switch at the rear of the case.

With less than a 4 V loop drop, this meter can be inserted in the 24 V input loop excitation provided by our Lynx, Leopard and Tiger meter families. The optional 4-20 mA outputs from these meters can power several SD-50X units as remote displays.

Two SD-50X meters can be mounted in a 96x96 DIN cutout and powered from the same loop, but display different scale readings such as °F and °C, lbs and kg or psi and Torr.

Easy scaling and high resolution also enables the SD-50X to be used as a precision counting scale, for nuts and bolts, barrels or boxes.

Typical Application Connections



Compatibility

The SD-50X has a matching DIN case style and panel appearance that is complementary to the Lynx, Leopard and Tiger family of meters, except the depth behind the panel is only 15 mm (0.59"). The SD-50X makes an ideal extra or remote display as it can operate either in conjunction with the 4-20 mA loop input or operate from the 4-20 mA analog output of most Leopard or Tiger meters.



Specifications

Input Configuration:Series connection to 4-20 mA DC current loop. 3.4 volts drop, plus 20 Ω (equivalent to 3.9 V @ 20 mA)

Full Scale Ranges:Standard meter is adjustable to any Display Span between a max negative reading of -19,999 and a max positive reading of 30,000, max resolution (50,000 counts), from any signal input span between 3.5 mA and 27.5 mA.

A/D Converter:16 Bit Sigma Delta

Accuracy:±0.02% of reading plus 2 digits

Temperature Coefficient: Typically 30 ppm/ °C plus 0.1 counts/ °C for zero offset.

Warm Up Time:.....One minute to specified accuracy

Conversion Rate:.....3 readings per second

Display:.....Liquid Crystal Display (LCD) 0.5"

Polarity:Assumed positive, displays - negative

Descriptors:.....Dip switch selectable dummy zero, °C, °F

Decimal Point:.....User programmable to six positions

Positive Over-range:.....Display shows - - - - -

Negative Over-range:.....Display shows - - - - -

Power Supply:.....Designed to be powered from the 4-20 mA current loop input signal. Min input 3.5 mA, Max continuous input 100 mA. 3.4 volts drop, plus 20 Ω (equivalent to 3.9 V @ 20 mA). Typically load is 200 Ω.

Operating Temperature: ...-10°C to +50°C

Storage Temperature:.....-20°C to +70°C

Relative Humidity:95% (non-condensing)

Case Dimensions:1/8 DIN, Bezel: 96x48 mm (3.78"x1.89")
Depth behind bezel 15 mm (0.59") plus 16.4 mm (0.65") for right-angled Connector

Weight:.....56.7 gms (2 oz)
141.7 gms (5 oz) when packed