

**Characteristics:**
**General Description:**

The single channel 4 ½ digit 4-20 mA Loop Indicator type T3010S-NIS provides process variable reading in field. It is a loop powered 4-20 mA unit with less than 1 V voltage drop. It monitors 4-20 mA current, 0-100 % percentage or process variable between -19999 to +19999 range with a 20 mm height 7-segments LCD display. Blinking display indicates over range or under range condition. An internal protected slot-in label is provided, after the last digit, to allow the unit measurement indication. Also loop tag indication can be provided. The indicator is housed in a moulded reinforced polyamide 66 / polycarbonate IP 66 case to allow installation in field area. It can be mounted on flat surface, front panel or 2" pipe or post. The housing is divided in two parts, one for cable connection and the other for indicator parameters setting.

**Field Configurability:**

4 push button provided, protected with a cover, allows the configuration of the indicator parameters: decimal point position, low and high scale indication.

**EMC:**

Fully compliant with CE marking applicable requirements.

**Features:**

- 4-20 mA loop powered, voltage drop < 1 V.
- PG 13.5 cable gland for wiring connection.
- 4 ½ digit 20 mm height LCD display.
- -19999 to +19999 visualization range.
- High Accuracy.
- IP 66 enclosure for field mounting.
- EMC Compatibility to EN61000-6-2, EN61000-6-4.
- In-field programmability by push-button.
- High Reliability, SMD components.

**Ordering Information:**

Model: T3010S-NIS

**Accessories:**

Front panel mounting kit: OPT3092  
2" pipe/front panel mounting kit: OPT3093

**Technical Data:**
**Input Range:**

4 to 20 mA nominal (3 to 22 mA reading).

**Voltage drop:** ≤ 1.0 V, loop powered.

**Over range protection:** ≤ 200 mA without damage.

**Visualization:**

4 ½ digit, 20 mm height, 7 segments LCD display.

**Range indication:** -19999 to +19999.

**Decimal point:** any position or disabled.

**Setting:** any value within range, direct or reverse indication.

**Out of range indication:** ≤ 3.5 mA or ≥ 20.5 mA blinking display.

**Engineering value:** internal slot-in label.

**Reading rate:** 2 measures per second.

**Performance:**

Ref. conditions 4-20 mA range, 23 ± 1 °C ambient temperature.

**Calibration accuracy:** ≤ ± 5 digit.

**Linearity error:** ≤ ± 3 digit.

**Series mode rejection:** ≤ ± 1 digit for 1 mA peak-peak 50 Hz signal.

**Temperature influence:** ≤ ± 0.2 digit for a 1 °C change.

**Compatibility:**

**CE** CE mark compliant, conforms to Directives: 2004/108/CE EMC, 2006/95/EC LVD, 2011/65/EU RoHS.

**Environmental conditions:**

**Operating:** temperature limits -20 to + 60 °C, relative humidity max 95 % non condensing, up to 35 °C.

**Storage:** temperature limits - 45 to + 80 °C.

**Mounting:**

flat surface, front panel or 2" pipe/post using appropriate accessories.

**Weight:** about 650 g.

**Connection:** by disconnection of clamp terminal blocks to accommodate terminations up to 2.5 mm<sup>2</sup>, PG 13.5 cable gland for wires entries.

**Wire entries:** 2 PG 13.5 cable gland, 7 to 12 mm external wire diameter, 24 mm operating wrench.

**Protection class:** IP 66, panel mounting IP 40 standard or IP 65 with gasket provided in mounting kit OPT3092 or OPT3093.

**Dimensions:** Width 144 mm, Depth 61 mm, Height 144 mm.

**Cut-out for panel mounting:** 139 x 139 mm.

Images:



Function Diagram:

FIELD

