



## Loop Powered LED Indicators for Field and Panel Mounting

### MAIN FEATURES

**LED-W11 and LED-P11 are two digital indicators for installation directly in a 4-20 mA loop without need for external power.**

**LED-W11 is designed for field mounting on wall, pipe or DIN rail and has a rugged and splashproof housing.**

**LED-P11 is the panel mount version with splashproof front.**

**The indicators are equipped with bright easy-to-read LED digits.**

**The scale is easily programmable, without reference signal, by two pushbuttons for any values between -1999 and 9999.**

#### 4-digit LED display

LED-W11 and LED-P11 are equipped with a bright luminous 4-digit LED display, which is easy to read even in the dark. The digits are red and 14.2 mm (0.56") high.

#### Loop powered with low voltage drop

The voltage drop is below 5V. LED-W11 and LED-P11 can therefore be connected to the 4-20 mA loop of any normal 2-wire transmitter with no need for external power.

#### High accuracy

With an accuracy of 0.05 % combined with a low temperature drift LED-W11 and LED-P11 allow for high precision read-outs.

#### Simple pushbutton scaling

The indication range can easily be scaled. The panel mounted LED-P11 is furnished with two front mounted pushbuttons. The field mounted LED-W11 is splashproof with two internal pushbuttons.

The scale can be set to any range between -1999 to 9999 for 4 to 20 mA input. Scaling operation does not require the use of a specific input signal.

Labels for different engineering units are included.

#### Transmitter option

The field indicator LED-W11 can be equipped with an integrated Inor In-Head transmitter of any type.

#### Rugged design with IP 65/NEMA 4X protection

LED-W11 is equipped with a rugged and splashproof IP 65 / NEMA 4X housing with double cable conduits for convenient installation.

LED-P11 has a splashproof front with IP 65 / NEMA 4X protection.

The indicators are designed for ambient temperatures between -25 to +80 °C (-13 to +176 °F).

#### HART transparent

Both indicators are HART transparent, which means that they will not interfere with or be disrupted by HART communication over the current loop.

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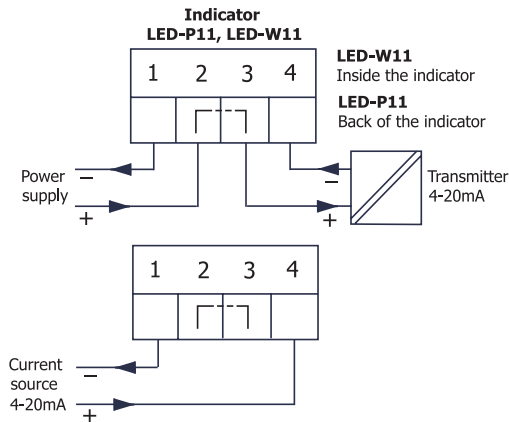
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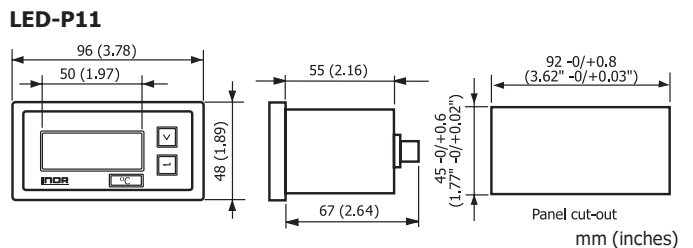
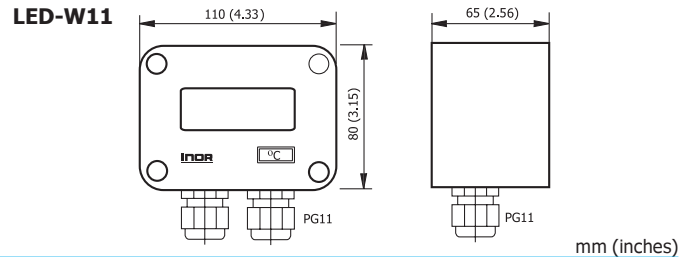
## SPECIFICATIONS LED-W11 / LED-P11

| <b>INPUT</b>                            |           |  |
|---|-----------|--|
| Current                                 |           | 4-20 mA  |
| Voltage drop                            |           | < 5 V  |
| Maximum current                         |           | 30 mA  |
| Minimum current for operation           |           | -3.5 mA  |
| <b>INDICATION</b>                       |           |  |
| Display                                 |           | Red LED with 4 digits including minus sign               |
| Digit height                            |           | 14.2 mm (0.56")  |
| Indication range                        |           | Any range between -1999 to 9999                          |
| Decimals                                |           | Selectable, 0 to 3                                       |
| Under range / Over range                |           | Flashing symbols LO/HI                                   |
| Response time, T (90 %)                 |           | Appr. 0.5 s  |
| Engineering units                       |           | Set of labels included (including blanks)                |
| <b>CONFIGURATION</b>                    |           |  |
| Indication range (4-20 mA input)        | LED-W11   | Two pushbuttons inside the housing                       |
|   | LED-P11   | Two pushbuttons in the front                             |
| Input signal for setting range          |           | Any current 3.5 mA to 30 mA                              |
| <b>ENVIRONMENT CONDITIONS</b>           |           |  |
| Ambient temperature                     | Operation | -25 to +80 °C (-13 to +176°F)                            |
|   | Storage   | -35 to +80 °C (-31 to +176°F)                            |
| Humidity                                |           | 0 to 95 %RH  |
| RFI influence                           |           | <0.5 % FS (typical)                                      |
| EMC (EN 50081-2, EN 50082-2 Industrial) |           | Criterion A/B  |
| <b>ACCURACY</b>                         |           |  |
| Indication                              |           | ±0.05 % FS ±1 digit                                      |
| Resolution                              |           | 12 bits (-4 µA)  |
| Temperature influence                   |           | ±0.25 % FS / 25 °C (45°F)                                |
| Long-term stability                     |           | ±0.1 % FS / year   |
| <b>HOUSING</b>                          |           |  |
| Dimensions                              | LED-W11   | 80 x 110 x 65 mm (3.15" x 4.33" x 2.56")                 |
|   | LED-P11   | 48 x 96 x 67 mm (1.89" x 3.78" x 2.64")                  |
| Weight                                  | LED-W11   | -230 g/8.1 oz  |
|   | LED-P11   | -120 g/4.2 oz  |
| Material / Flammability (UL)            | LED-W11   | PC / UL 94-5V Self-extinguishing                         |
|   | LED-P11   | Noryl / UL 94 HB Self-extinguishing                      |
| Protection                              | LED-W11   | IP 65 / NEMA 4X  |
|   | LED-P11   | IP 65 / NEMA 4X (front)                                  |
| Wire connections                        | LED-W11   | Stranded, ≤1.5 mm <sup>2</sup> , AWG 16, 2 conduits PG11 |
|   | LED-P11   | Stranded, ≤2.5 mm <sup>2</sup> , AWG 12                  |
| Mounting                                | LED-W11   | Rail acc. to DIN EN 50022, 35 mm, wall or 2" pipe        |
|   | LED-P11   | Panel mounting, cut-out 45 x 92 mm (1.77" x 3.62")       |

## CONNECTIONS



## DIMENSIONS



## ORDERING INFORMATION

|                                 |                   |
|---------------------------------|-------------------|
| <b>LED-W11</b>                  | <b>70LEDW1101</b> |
| <b>LED-P11</b>                  | <b>70LEDP1101</b> |
| <b>Configuration</b>            | <b>70CAL00001</b> |
| <b>Transmitter mounting kit</b> | <b>70ADA00024</b> |
| <b>Pipe mounting kit</b>        | <b>70ADA00021</b> |
| <b>Din-Rail mounting kit</b>    | <b>70ADA00022</b> |

## DISTRIBUTION