



## ITI 16

Programmable digital panel meter for process signal measurements

ITI 16 is a programmable digital process panel meter dedicated to process voltage and current measurements.

## Description

ITI 16 are programmable digital panel meters dedicated to process voltage and current measurements.

- Panel meter size: 96 mm x 48 mm
- IP65 protected
- Two-color display for color change on alarm or pre-alarm
- Process signal measurement (0/4-20 mA, 0/100 mV / 1 V / 10 V)
- 2 different power supplies available:
  - 90 to 260 V~ 47/420 Hz and 115 to 300 V-
  - 20 to 60 V- and 18 to 44 V~ 47/420 Hz

### 3 versions:

- Version 0: Panel meter only
- Version 1: 2 limit relays, 1 programmable analogue output (4-20 mA or 0-10 V), 1 digital output RS232/485, MODBUS/ASCII
- Version 2: 2 limit relays

# Specifications

## Process signal measurement indicator

Type	Range	Actual range	Resolution	Accuracy (1 year) (23°C ±5°C)	Comments
DC voltage	100 mV 1 V 10 V 100 V	-15 to +160 mV -0.1 to +1.2 V -1 to +12 V -10 to +120 V	10 µV 100 µV 1 mV 10 mV	0.1% + 20 µV 0.1% + 200 µV 0.1% + 2 mV 0.1% + 20 mV	Input impedance 10 MΩ 10 MΩ 1.11 MΩ 10 MΩ
DC current	20 mA 4-20 mA	-2 to 24 mA +3.2 to 24 mA	1 µA	0.1% + 4 µA	Loop power: 24 V ±10% @ 20 mA Applicable maximum current: 50 mA

## Further features

Measurement hold	Short-circuit on the rear panel
Statistics	Memorizing of maximum and minimum values
Alarms	2 pre-alarm thresholds and 2 alarm thresholds with acknowledgment
Programmable thresholds and relays	In addition to the front LED indication, 2 relays can be used on alarms. Breaking capacity from the relays: 5 A / 250 V~, 1 250 VA or 5 A / 30 V-, 150 W max
Analogue output	Programmable in 0-10 V or 0-20 mA - Resistance of load $\geq 1$ kΩ sur 10 V, $\leq 800$ Ω sur 20 mA - Insulation input/output: 60 V, except if the ITI supplies the sensor - Accuracy: $\pm (0.1\% + 5$ mV or 10 µA) - Resolution: 4 000 pts - Programmable in 2 points by the keyboard or software
Digital output	Programmable digital output by keyboard allowing communication in ASCII or MODBUS RTU for network applications When connected in network to transmitters or AOIP data acquisition systems and a PC equipped with AOIP softwareLW1, the instrument will display measurements in real or remote time in the form of synoptic, curves, numerical bargraphes, tables.

Scaling	Linear scaling in two points or linearization in 3 to 22 points
Sampling rate	2.5 samples / s

## General specifications

Size	104.5 x 57.5 x 101 mm
Weight	160 g
Display	Two-color display green / red with change of color on alarm or pre-alarm From -19,999 to 99,999 points, height: 14 mm
Supply	230 V at $\pm 10\%$ (50/60 Hz) Other power supplies available in option

## Environmental specifications

Reference range	23°C $\pm 5^\circ\text{C}$ (45 to 75 % w/o condensing)
Operating reference range	0 to 50°C (RH: 20 to 80 % w/o condensing)
Limit operating range	-10°C to +50°C
Storage conditions	-30°C to +70°C (RH: 10 to 80 % w/o condensing)
IP protection	IP40 in ABS case IP65 over front panel

## Safety specifications

Class	In accordance with EN 61010-1 Category II, pollution 2
Rated voltage	150 V
EMC conformity	

