

# MEASURE TRANSMITTERS

AC / DC current or voltage

## Series TM

◆ This range is declined into 2 versions

**TMA AC current or voltage input**

**TMP DC current or voltage input**

which will accept a non-standard signal and convert it into a 0/10V voltage or 0-4/20mA current (active or passive) standardized insulated output signal.

For processing or transmission of signals ...

◆ **Options** : (specify on order)

-Inverted or shifted scales.

-Bidirectionnal inputs.

-5A<sub>dc</sub> input (TMP)

-Bidirectionnal voltage output  $\pm 10V$ .  $L_r > 1k\Omega$

-Bidirectionnal current output  $\pm 20mA$ .  $L_r < 320\Omega$

-Passive current output 0-4/20mA  $U: 30V$  max.

-Standard response time : 250ms

Option shorter response time : from 10ms to 250ms

Option longer response time : from 250ms to 30s (specify on order)

-Version HI : High insulation 4kV



◆ **Accessibilities** :

Plug-off connectors for screwed connections.

Internal selection of the input and output calibers by jumpers, accessible behind the front face.

5A<sub>ac</sub> Current input, safened by a screwed connector.

### Transfer

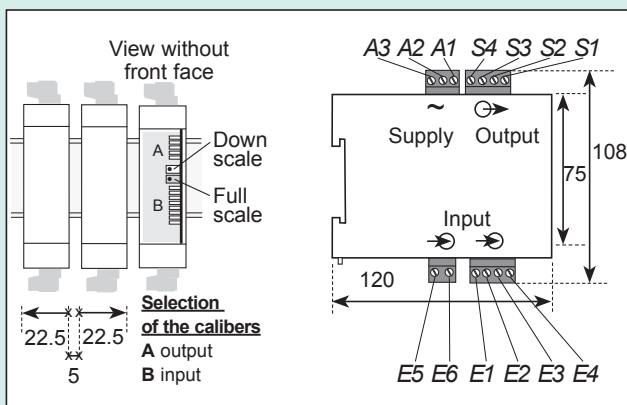
- ◆ Accuracy rating :  $\leq 0.3$  (ac) and  $\leq 0.2$  (dc)
- ◆ Ripple :  $\leq 0.5\%$
- ◆ Galvanic partition : 2kV eff. 50Hz 1min. (input / output / power supply)  
TMP-Hi (4kv eff. - 50 Hz - 1 min.)
- ◆ Response time :  $\leq 250ms$  [Tr] (in standard)
- ◆ Pass-band : 1.5Hz (-3 decibels) [PB:0.35/Tr]
- ◆ T° coefficient :  $\leq 0.015\%/^{\circ}C$

### Environment

- ◆ Operating temperature :  $-10^{\circ}C$  to  $+60^{\circ}C$ .
- ◆ Storage temperature :  $-30^{\circ}C$  to  $+80^{\circ}C$ .
- ◆ Disturbance immunity according to the standard IEC 61000-6-2 (IEC 61000-4-3 : level 3, IEC 61000-4-4 : level 4, IEC 61000-4-6 : level 3)
- ◆ **CE** marking.

### Description

◆ **Housing** : (H x L x D) 75 x 22.5 x 120 mm (H=108, with terminals)







◆ **Protection** : Housing / terminals : IP 20

◆ **Housing** : Self-extinguishing case of black UL 94VO ABS for latching on symmetrical DIN rail (mount the instruments vertically and provide a 5mm space between each). Plug-off terminals for screwed connectings (2.5mm, flexible or rigid).

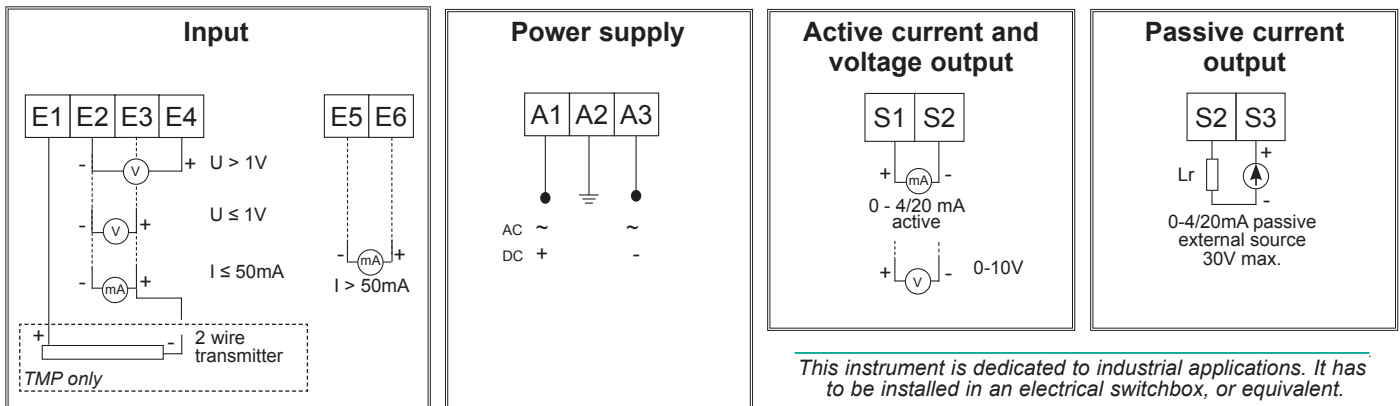
◆ **Weight** : 130g (with packaging).

# Features

Names of the transmitters	Ranges	Max. sensi-tiveness	Min. sensi-tiveness	Impedance	Permanent overload	Features
<b>AC current and voltage</b> <b>TMA</b> 	100 mVac	0/10 mV	0/100 mV	100 kΩ	25 V	Internal selection of the range by removable jumpers, and fine settings by multi-turn potentiometers. Voltage : 10mV / 100mV / 1V / 10V / 100V / 650V ac Current : 5mA / 5A ac Possibility to perform shifted scales.
	1 Vac	0/0.1 V	0/1 V	100 kΩ	75 V	
	10 Vac	0/1 V	0/10 V	1 MΩ	750 V	
	100 Vac	0/10 V	0/100 V	1 MΩ	750 V	
	650 Vac	0/100 V	0/650 V	1 MΩ	750 V	
	50 mAac	0/5 mA	0/50 mA	20 Ω	100 mA	
	5Aac	0/500 mA	0/5 A	0.02Ω	7.5 A	
<b>DC current and voltage</b> <b>TMP</b> 	±100 mVdc	0/10 mV	0/100 mV	100 kΩ	25 V	Internal selection of the range by removable jumpers, and fine settings by multi-turn potentiometers. Voltage : ±10mV / ±100mV / ±1V / ±10V / ±100V / ±500V dc Current : ±5mA / ±50mA dc Possibility to perform shifted scales. Integrated supply for 2-wire sensors 22V ±20% (Imax:25mA). Bidirectionnal inputs.
	±1 Vdc	0/0.1 V	0/1 V	100 kΩ	75 V	
	±10 Vdc	0/1 V	0/10 V	1 MΩ	750 V	
	±100 Vdc	0/10 V	0/100 V	1 MΩ	750 V	
	±500 Vdc	0/75 V	0/750 V	1 MΩ	750 V	
	±5 mAdc	0/0.5 mA	0/5 mA	20 Ω	100 mA	
	±50 mAdc	0/5 mA	0/50 mA	20 Ω	100 mA	

Name	Description	Coding
<b>Current outputs</b> 	0/20 mA 4/20 mA Load resistance : < 750Ω ±20mA Load resistance : < 320Ω	AC current / voltage input TMA DC current / voltage input TMP
<b>Voltage outputs</b> 	0 / 10 V ±10V Load resistance : > 1kΩ	
<b>Power supply</b>	20 to 270 Vac and 20 to 300 Vdc (50/60/400Hz in AC)	
<b>Power draw</b>	On load : < 4,5VA (2,5W) Empty : < 2,5VA (1W)	

# Wiring



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