

# Digital level indicator

## IDXYmP Series



### Description

Programmable digital device able to measure the tilt on two axes. Can be supplied preprogrammed at standard values.

The standard versions, with transistor or relay outputs, provide a single output for vehicle/platform level checks. Versions are also available with supplementary outputs per axis or half-axis selected via parameters and with programmable delay management.

The device is housed in a tough and compact polymer shell and has no moving parts.

Optionals:

- Supplementary relay with  $I_{max}=2$  A (for main ID output or one axis/half-axis output)
- RS-232 serial connection for Psion™/PC
- Zero wire to re-calibrate the zero of the device
- Safety: Category 1 or B (EN 954-1) or not complying (to EN 954-1), function of requested configuration

Technical data	Transistor output		Relay output	
	Positive	Negative	12 V	24 V
Power supply	8 to 30 Vdc		9.2 to 17 Vdc	17.8 to 30 Vdc
Peak voltage	35 Vdc		-	35 Vdc
Output voltage rating	$V_{batt} - 1.1V @ 0.5 A$	0.6 V @ 0.6 A 0.1 V @ 0.1 A	NO or NC contact	
Max current	$I_{max} = 0.5 A$	$I_{max} = 0.6 A$	$I_{max} = 0.2 A$ and $V_{max} = 60 V$	
Power draw	30 mA		60 mA	45 mA

### Common characteristics:

Zero re-calibration	via RS-232 or zero wire, optionals	Output	1
Intervention range	$\pm 20^\circ$ per axis	Indicator LED	Green
Repeatability error	$\pm 0.05^\circ$ up to $10^\circ$ , $\pm 0.10^\circ$ from $10^\circ$ to $20^\circ$	Hysteresis	0.05 degrees
Temperature drift	0.005 degree/ $^\circ C$ from $-10$ to $50$ $^\circ C$ , 0.01 degree/ $^\circ C$ otherwise	Operating temperature	$-20$ to $70$ $^\circ C$
Intervention delay	0.7 to 25.5 sec	Standard protection grade	IP 66
Output protection	short-circuit and overloads	Standard cable length	30 cm

### Characteristics of versions with supplementary outputs for axes X/Y or semi-axes X<sup>+</sup>/X<sup>-</sup>, Y<sup>+</sup>/Y<sup>-</sup>.

Positive axis/half-axis outputs		Negative axis/half-axis outputs		Common characteristics	
Output voltage	$V_{batt} - 1 V$	Output voltage	0.2 V	Axes output protection	Momentary short-circuit
Output resistor	350 $\Omega$	Output resistor	80 $\Omega$	Supplementary LED	Red
Power output <sup>(*)</sup>	0.4 W	Power output	0.6 W	N. outputs	2/4 (axis/half-axis)

(\*) Pmax=5W outputs are available on request.

### Dimensions [mm]

