mPA – BAROMETER "MICRO" SERIES (Rev.1 010215)

Description

mPA series barometers are developped to be used in applications where it's need low cost, reliability and longlife.
The sensor output signal is conditioned by an internal microprocessor and temperature compensated to ensure a linear and stabilized measuring perfectly proportional with atmospheric pressure.
mPA provides high accuracy measurements with excellent repeatability, low hysteresis and good behaviour at variations of temperature.
The mPA barometer requires a DC supply voltage from 9 to 24Vdc; besides the low power consumption render it suitable for remote meteorological data acquisition systems powered by solar panel. It is available with analog outputs 0 ... 5Vdc and 4 ... 20mA.

Advantages

- Excellent quality / price ratio
- Excellent repeatability
- Low hysteresis
- Excellent temperature behavior
- Calibration Certificate certifiability by Accredia

Main Applications

- Industrial applications
- Meteorology and Environmental analysis
- Hydrology and glaciology
- Wind energy

Technical Specs

Model	mPA-I	mPA-V
Standard measuring range	800…1100hPa (600…1100 o 500…1100hPa on request)	
Transducer	Integrated differential piezo-resistive transducer temperature compensated	
Output	4…20mA	0…5Vdc
Power supply and consumption	9…24Vdc @ < 28mA	9…24Vdc @ < 10mA
Accuracy (max)	±0.5hPa @ 900…1100hPa, ±0.7hPa @ 800…900hPa	
Repeatibility	±0.3hPa	
Long term stability	±0.01hPa / year	
Response time (63%)	1ms	
Operating temperature	-40…+125°C	
Maintenance	Check >24 months	
Sensor housing & materials	IP65, Polycarbonate and stainless steel screws	
Dimensions & Weight	65 x 50 x 40mm, 100g	
Cable and electrical connection	Shielded cable, L=1m Red: +Vdc Whyte: +Out; Gray+shield: Gnd	

Installation according to the application

Application	Heigh from ground	Location and orientation
Meteorology (ref. Annex 8 - WMO)	1,5…2m	Install in a ventilated area (not pond), indoor. In the meteorological applications it advises the installation inside the datalogger box.