

# mPA - BAROMETER "MICRO" SERIES (Rev.1 010215)



## **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

### **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.

#### **Technical Specs**

| Model                        | mPA-I  | mPA-V           |
|------------------------------|--|-----------------|
| Standard measuring range     | 8001100hPa (6001100 o 5001100hPa on request)                               |                 |
| Transducer                   | Integrated differential piezo-resistive transducer temperature compensated |                 |
| Output                       | 420mA  | 05Vdc           |
| Power supply and consumption | 924Vdc @ < 28mA  | 924Vdc @ < 10mA |
| Accuracy (max)               | ±0.5hPa @ 9001100hPa, ±0.7hPa @ 800900hPa                                  |                 |
| 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                    | Shielded cable, L=1m   |                 |
| electrical connection        | Red: +Vdc Whyte: +Out; Gray+shield: Gnd                                    |                 |

#### Installation according to the application

| Application             | Heigh from ground  | Location and orientation  |
|-------------------------|--|---|
| Meteorology (ref. Annex | x 1,52m Install in a ventilated area (not pond), indoor. In the meteorological |   |
| 8 - WMO)                |  | applications it advises the installation inside the datalogger box. |