



# PW5 and PM5



## Digital displays for the measurement of strain gauges

### Applications:

Weighing cells; force, angle, acceleration, torque, gas pressure and mass pressure sensors



We have added two new types to our proven **PU5** range in the 96 x 48 mm housing. With the **PU5** units, it was possible to operate transmitters (4-20 mA; 0-10 V) directly without additional auxiliary voltage. With the **PW5** and **PM5** displays, strain gauge sensors can now be measured easily and directly with 1 mV/V, 2m V/V or 3.3 mV/V.

### Fields of application and special properties of the PW5

- Recording of measuring bridges in 6-wire technology
- Operation of highly precise weighing balances and other high-grade strain gauge sensors
- High-ohm, highly accurate instrument amplifier input
- Pre-calibrated weighing cells can be selected and freely scaled without renewed calibration on the unit according to type

### Fields of application and special properties of the PM5

- Recording of measuring bridges in the 4-wire technology
- Switch contact for automatic 80% calibration of the bridge
- High-grade difference amplifier input for use in interference-affected industrial environment
- High accuracy even at high measuring rates

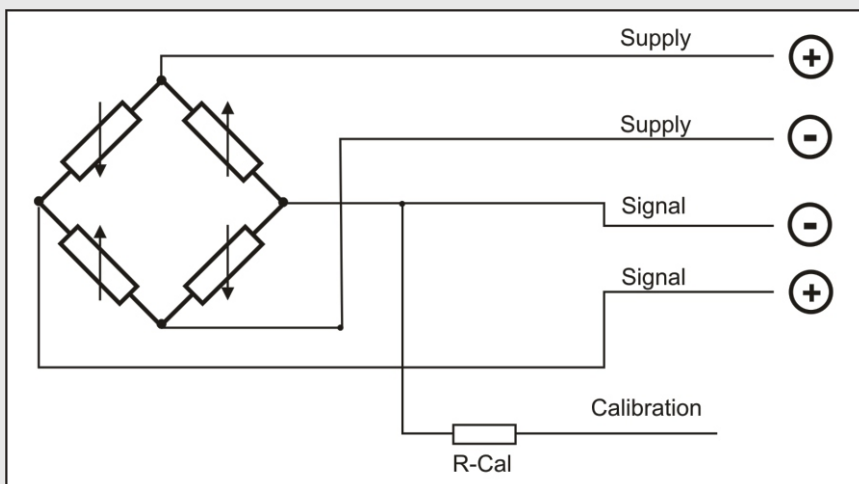
The complete overview of the special properties of both units can be found on the next page.





## Characteristics of PW5/PM5

- Adjustable input amplification for 1 mV/V, 2 mV/V or 3.3 mV/V sensors
- 10 V integrated bridge supply for standard 350 ohm (200 ohm to 500 ohm) measuring bridges
- Permanent line-break monitoring
- Bipolar input range for compression and tensile forces
- Integrated factory calibration for pre-calibrated weighing cells
- Auto-sensor recognition for 1 mV/V, 2 mV/V and 3.3 mV/V sensors
- Measuring rate up to 50 measurements/s (measuring time adjustable from 0.02s...10.00s)
- 24 Bit transducer resolution, of which up to 19 bits (500,000 points / 0.0002 % of measuring range) noise-free!
- High long-term and temperature stability
- 5-digit digital display with range from - 9999 to 99999 digits
- Free scaling and setting of decimal point
- Alignment of a sensor with up to 30 additional calibration points
- Tare function for manual and automatic control
- Fully automatic or semi-automatic calibration functions (**PM5 with 80% calibration**)
- MIN/MAX value recording, can be called up or shown permanently in the display
- Integrated conversion function with adjustable factor
- Complex parameter and access security via several user levels with event counter



Picture: PM5 4-wire with 80% calibration

## Options for PW5/PM5

- Customised internal or external bridge supply
- Different input voltage ranges on request
- Up to 4 switch outputs (changeover contact) as threshold switch, line break warning etc.
- Galvanically insulated analogue output with 0...10 V, 0...20 mA or 4...20 mA
- Via the analogue output, the unit can be easily operated as a measuring transducer for an SPS, whereby the output range is simply adjusted via the display.
- Galvanically insulated interface RS232 or RS485
- Supply voltage with 230 VAC or 24 VDC
- Special software or functions according to customer's wishes

