



# Digital panel meter

## **DV** 3½- and 4½-digit

Voltage, current, shunt, alternating voltage, resistance, temperature

4

## **P4** 4-digit

Current loop 4...20mA

5

*NEW*

## **PVE** 4- and 5-digit

Voltage, current, shunt, alternating voltage, resistance, temperature, strain gauge, frequency

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## **PU** 5-digit

Universal measuring input: voltage, current, shunt, resistance, temperature  
Measuring input: strain gauge

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*NEW*

## **PZ** 5-digit

Two inputs with calculation: voltage, current

8

*NEW*

## **PB** 4- to 6-digit

Interfaces: RS232/RS485, CANopen, BCD

9

*NEW*

## **PC** 4- to 6-digit

Counter

10

*NEW*

## **BxO** Bargraph 10, 20, 30 segments

Voltage, current

11

## **BxD** Bargraph 20 segments, digital display

Voltage, current

11

## **PBxD** Bargraph 20 segments, digital display, switching point

Voltage, current

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## **MSU** Multipoint selector

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## **DIM** Dimmer

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## **PS** Setpoint adjuster

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## Large-size display

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## Notes

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## DV 3½- and 4½-digit

Measuring inputs: voltage, current, shunt, alternating voltage, resistance, temperature



48 x 24 mm digit height 10 mm



96 x 24 mm

digit height 14 mm



96 x 48 mm

digit height 14 mm



72 x 24 mm

digit height 14 mm



96 x 48 mm

digit height 20 mm



72 x 36 mm

digit height 14 mm



96 x 48 mm

digit height 14 mm



48 x 48 mm digit height 10 mm

### DV

The DV line has been designed as a range of simple displays that can be set by potentiometers.

### Options

analogue output  
sensor supply  
protection IP54 / IP65  
green LEDs

NEW

## P4 4-digit

Measuring input: current loop 4...20 mA



48 x 24 mm digit height 10 mm



72 x 24 mm

digit height 10 mm



72 x 36 mm

digit height 14 mm



96 x 24 mm

digit height 14 mm



96 x 48 mm

digit height 14 mm

### P4

The units in the P4 range have been designed for the display of a current loop signal. The instruments do not need any power supply, they take their energy from the current loop.

Configuration is carried out by allocating the display data via a membrane keypad. Other advantages of the P4 are its integrated MIN/MAX memory and the fact that it is not very deep.

## PVE 4- and 5-digit

Measuring inputs: voltage, current, shunt, alternating voltage, resistance, temperature, strain gauge, frequency



48 x 24 mm digit height 10 mm



96 x 24 mm

digit height 14 mm

### PVE 4-digit

The PVE4 range is equipped with two switch outputs and can, in conjunction with the many measuring inputs and options, be used for virtually any application. The bright LEDs and the ease of operation via the membrane keypad make day-to-day handling of the unit very easy indeed.



72 x 36 mm

digit height 14 mm



48 x 48 mm digit height 10 mm



96 x 48 mm

digit height 14 mm



96 x 24 mm

digit height 14 mm

### PVE 5-digit

This extension offers a display range of -9999...55000 digit.

Measuring input: 0...10V, 0/4...20mA

Resolution: 16 bit



96 x 48 mm

digit height 14 mm

### PVE options

analogue output  
sensor supply  
protection IP54 /IP65  
green LEDs



NEW

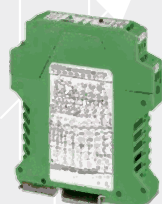
## PU 5-digit

Universal measuring input: voltage, current, shunt, Thermocouple resistance, platinum thermometer strain gauge

Measuring input:



RS232  
RS485



0...10V  
0/4...20mA



0...10V  
0/4...20mA



96 x 48 mm

digit height 14 mm

**Universal measuring input** free configurable

Standard signals DC -1...5/10V, 0/4...20mA

Voltage

DC +/-15/35/75/150/300/500mV

Voltage

DC -500...1250/2500mV

Current

0...2/5mA

Platinum thermometer

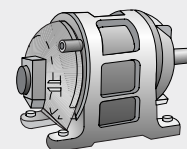
PT100/PT200/PT500/PT1000

Thermocouples

L, J, K, B, S, N, E, R, T

Resistance

100/1k/10k Ohm



Hz

PT100  
PT200  
PT500  
PT1000



TC



L, J, K, B, S,  
N, E, R, T

## PU 5-digit

This unit has been designed with versatility in mind so as to cover a broad area of application. The resolution of the input signal is 24 bits, making it possible, for example, to register thermocouples with a resolution that has previously only been customary with laboratory units.

### Technical Data

Resolution 24 bit

Measuring rate up to 50 samples/s

MIN/MAX memory

30 point linearization

**Analogue output** (optional)

Voltage 0...10V

Current 0/4...20mA

**Sensor supply** (optional)

10V, 24V

**Switching points** (optional)

Relays 4 change-over contacts

230V/AC 5A

**Interface** (optional)

RS232, RS485

(CANopen in 2003)

IP54 (standard)

IP65 (optional)

Housing

NEW

## PZ 5-digit

Two inputs with Calculation: voltage, current, interface



96 x 48 mm

digit height 14 mm

$$x = (\ln1 + \ln2) * K$$

$$x = (\ln1 - \ln2) * K$$

$$x = (\ln1 * \ln2) * K$$

$$x = (\ln1 / \ln2) * K$$

$$x = (\ln1 * 100 / \ln2) * K$$

## PZ 5-digit

The PZ5 ist designed as a 2-channel display device and is used to record and calculate standard signals, 0...10V an 0/4...20mA.

With a resolution of 24 bits, it permits extremely accurate measurement of two analogue values that are related to each other.

To extend the scope of operation, other options are available in addition to the standards.

### Measuring input (standard)

Standard signals

Voltage 0...10V

Current 0/4...20mA

Resolution 24 bit

Measuring rate max. 5 samples/s

### Analogue output (optional)

Voltage 0...10V

Current 0/4...20mA

### Sensor supply (optional)

10V, 24V

### Switching points (optional)

Relays 4 change-over-contacts  
230V/AC 5A

### Interface (optional)

RS232, RS485  
(CANopen in 2003)

### Housing

IP54 (standard)  
IP65 (optional)



NEW

## PB 4- and 6-digit

Interfaces: RS232/RS485, CANopen, BCD



72 x 24 mm

digit height 14 mm



72 x 36 mm

digit height 14 mm



96 x 24 mm

digit height 14 mm



96 x 48 mm

digit height 14 mm

### PB

The PB series has been designed as a panel-mounting instrument for activation via an interface. Available activation systems are serial interfaces and BCD-multiplexing.

Depending on the size of the housing, the units have a 4- or 6-digit display. Particular attention has been paid to the design of the display, which makes it possible to depict a °C or °F in the last position.

The protocol of the PB's is configurable to the greatest possible extent, which means that communication to a wide variety of instruments buses is possible by adjusting the parameters on the unit. Furthermore, this unit features various presets for the communication settings, minimizing the time needed for configuration. These presets are based on existing protocols.

### Interfaces

RS232/RS485

BCD multiplex

CANopen (2003)

Profibus-DP



NEW

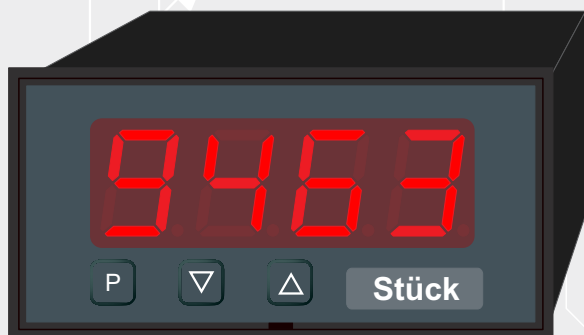
## PC 4- and 6-digit

Input: counter



72 x 24 mm

digit height 14 mm



72 x 36 mm

digit height 14 mm



96 x 24 mm

digit height 14 mm



96 x 48 mm

digit height 14 mm

### PC

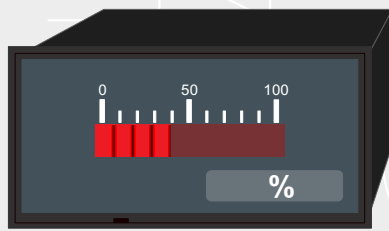
The counters that make up the PC line are designed as panel-mounting instruments and are intended for simple applications.

In addition to the input, the counters feature a reset and start/stop or gate time input.

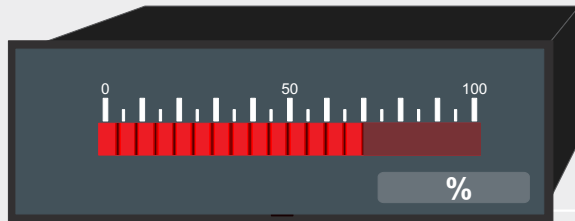
For the accurate recording of mechanically generated impulses, a filter can be activated, and the edge for triggering can also be freely parametrized.

## Bargraph 10, 20, 30 segments, digital display

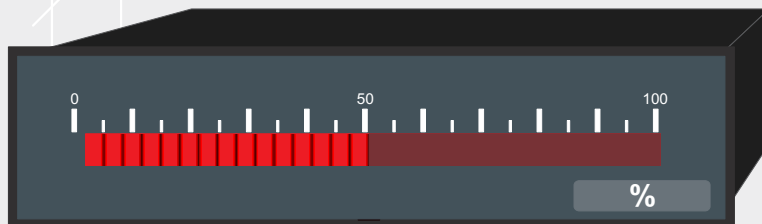
Measuring input: voltage, current



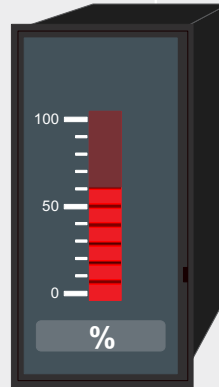
48 x 24 mm



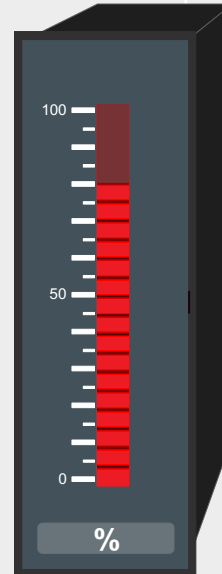
72 x 24 mm



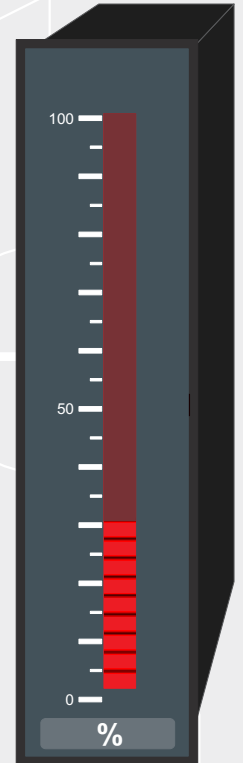
96 x 24 mm



48 x 24 mm



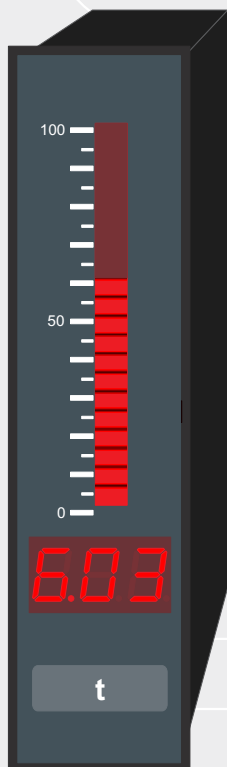
72 x 24 mm



96 x 24 mm

### Bargraph

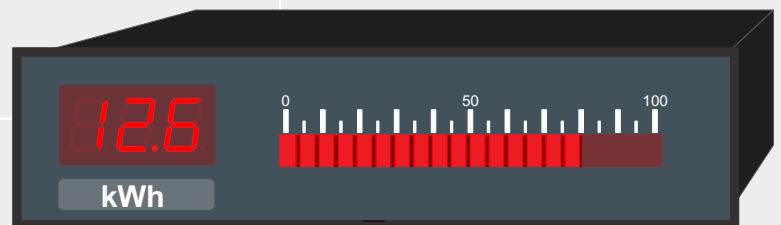
The bargraph are available in different designs and are suitable for the simple display of filling levels etc. The units offer all inputs for voltage (0...10V) and current (0/4...20mA).



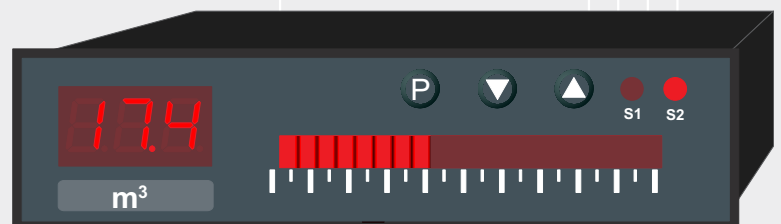
96 x 24 mm



96 x 24 mm



96 x 24 mm



96 x 24 mm

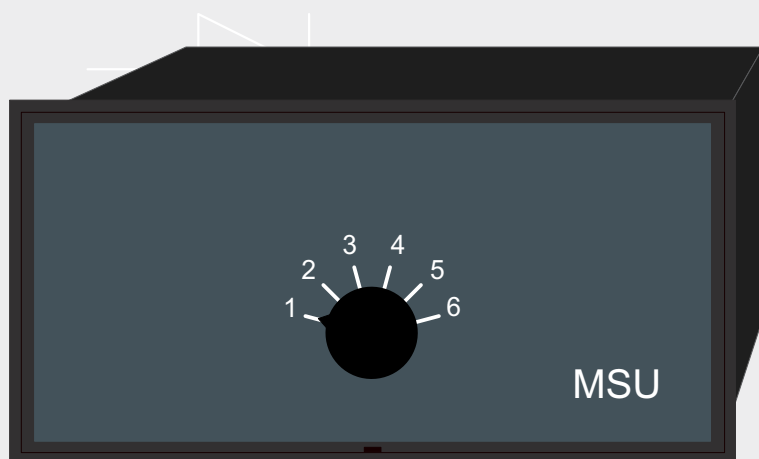
### Bargraph with digital display

The units with membrane keypads are designed with processor technology and have two switching points, MIN/MAX-memory and an 8-point linearization.

## Multipoint selector

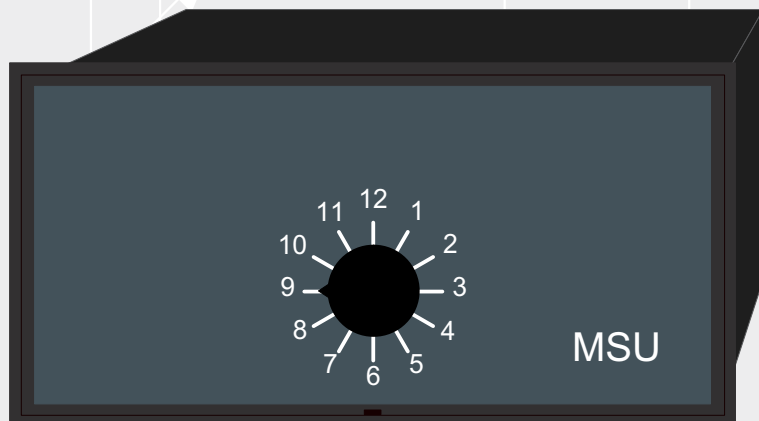
## Dimmer

## Setpoint adjuster



96 x 48 mm

6 measuring points 4-wire



96 x 48 mm

12 measuring points 2-wire



96 x 48 mm

Dimmer



96 x 48 mm

digit height 14 mm

### MSU6 multipoint selector

The MSU6 can switch 6 sensors in a 4-wire system to a display unit.

Hz

### MSU12 multipoint selector

The MSU 12 can switch 12 sensors in a 2-wire system to a display unit.

### DIM dimmer

The unit can control the brightness of up to 12 display units \* simultaneously.

\*Display units with suitable inputs.

### PS4 setpoint adjuster

Outputs: 0...10V; 0/4...20mA

Display: +/-19999 digit

A

# Overview large-size display

Our large-size displays have a rugged housing made of aluminium profile with IP65 protection and a black powder coating (RAL 9005). The units are available either for building into or mounting on to the relevant devices, and are also available as a twin display.

## 7-segment displays

These displays are available in digit heights of 57, 100, 150, 200, 250 und 300 mm with maximum of eight digits. Input options for activating the display are 0...10V, 0/4...20mA, RS232, RS422, RS485 and CANopen.

## Dot matrix LED

Large-size displays in this design are available with digit heights of 30, 50 and 100 mm; they can be combined as a single or multi-line display of different length in one display.

