Measuring device PMI-02 is microprocessor controlled panel meter designed for measuring of analog signal and recalculating to wished indication in any standards.

If needed PMI-02 allows regulation by two reversing or three switching relay.
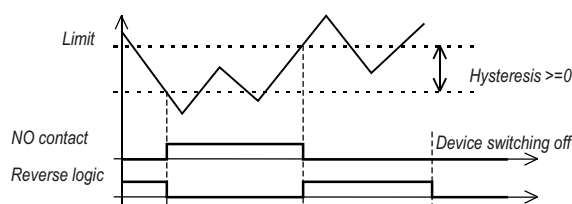
According to the configuration of input it is manufactured as voltmeter, ampermeter, ohmmeter, resistor thermometer or thermo element thermometer, frequencymeter and counter.
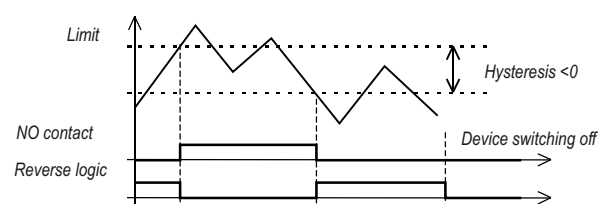The meter can work also as integrator which integrates in time measured value.

The core of the meter is exact 18-bit A/D converter which ensures accuracy and stability of measurement. Controlling microprocessor processes measured values and enables simple control of the device by four buttons on the front panel. While measuring, PMI-02 stores information about maximal and minimal measured value.

Measured value of the signals is compared with set limit values. After reaching preset value, appropriate relay switches. Switching of relays is indicated by LED diodes on the front panel. Through these limiting relays it is possible to control simple industrial processes such as regulation of height of level, overflow, temperature. It is possible to control error levels of input signals and to announce their exceeding.

All three limiting comparators are completely independent and enable to set value of comparative level, level of hysteresis, time delay of switching of certain relay on and off and the logic of switching. Function of the comparator changes according to the fact, whether the value of hysteresis is positive or negative.

Function of the comparator (hysteresis =>0)

Function of the comparator (hysteresis<0)

PMI-02 allows to collect data from processes, to send them to the master system through serial line (RS232, RS485) or as own **output analogue signal** corresponding to the information on the display.

It is possible to build-in a supporting **power supply** , which is effective for supplying of evaluating sensors.

If it is necessary to back up measured data of counter or measured maximum or minimum of analog input, it is possible to use **back up battery**.

It is also possible to use built-in clock of real time and back up data memory when **creating special user software**.

Marking of devices PMI-02:

PMI-02 **XXXX X X XX X X X X**
  1   2 3   4   5 6 7 8

1. Type and input range

Voltage inputs			
Direct voltage		Alternating voltage TRMS	
VDC01:	0 ÷ 100,00mV	**VAC01**:	0 ÷ 100,0mV
VDC02:	0 ÷ 1,0000V	**VAC02**:	0 ÷ 1,000V
VDC03:	0 ÷ 10,000V	**VAC03**:	0 ÷ 10,00V
VDC04:	0 ÷ 100,00V	**VAC04**:	0 ÷ 100,0V
VDC11:	± 100,00mV	**VAC05**:	0 ÷ 500,0V
VDC12:	± 1,0000V		
VDC13:	± 10,000V		
VDC14:	± 100,00V		

Current inputs			
Direct current		Alternating current TRMS	
ADC01:	0 ÷ 100,00µA	**AAC01**:	0 ÷ 100,0µA
ADC02:	0 ÷ 1,0000mA	**AAC02**:	0 ÷ 1,000mA
ADC03:	0 ÷ 10,000mA	**AAC03**:	0 ÷ 10,00mA
ADC04:	0 ÷ 100,00mA	**AAC04**:	0 ÷ 100,0mA
ADC05:	0 ÷ 1,0000A	**AAC05**:	0 ÷ 1,000A
ADC06:	0 ÷ 10,000A	**AAC06**:	0 ÷ 10,00A
ADC07:	0 ÷ 20,000mA	**AAC07**:	0 ÷ 5,000A
ADC08:	4 ÷ 20,000mA		
ADC11:	± 100,00µA		
ADC12:	± 1,0000mA		
ADC13:	± 10,000mA		
ADC14:	± 100,00mA		
ADC15:	± 1,0000A		
ADC16:	± 10,000A		

Measuring of temperature		
Resistor's sensors		Termocouple
PT100:	sensor Pt 100	**TCI**: Internal measuring of open end temperature
PT1000:	sensor Pt 1000	
NI100:	sensor Ni 100	**TCE**: External measuring of open end temperature by Pt 100
NI1000:	sensor Ni 1000	

Measuring of resistance	
R0,1K:	resistor 0 až 100,00
R1,0K:	resistor 0 až 1000,0
R10K:	resistor 0 až 10,000k

Measuring of weight	
TNZ:	tenzometric bridge 2 - 16 mV/V *

* These device are not produced in integrator version.

Digital measuring	
CTC01:	counter 5V *
CTC02:	counter 24V *
IRC01:	IRC counter 5V *
IRC02:	IRC counter 24V *
FRQ01:	frequency measuring 5V
FRQ02:	frequency measuring 24V
FRQ03:	line frequency measuring (230VAC) *

* These devices are not produced in integrator version.

2. Type of supply

A: 230V, 50Hz   **B**: 24V, 50Hz   **C**: 110V, 50Hz

3. Number of output relays

0: none   **1**: one relay
2: two relays   **3**: three relays

4. Analog output type

00: none
A1: 0 to 20mA
A2: 4 to 20mA
V3: 0-10V
V4: ±10V

5. Digital output type

0: none   **1**: RS232
2: RS485   **3**: RS485 galvanic separated

6. Support supply

0: none   **2**: =24V

7. Integrating version

S: standard device   **I**: integrator

8. Batery backup

0: device without a batery   **B**: device with a batery

__Marking example:__

Counter, 24V input, power supply 230VAC, two relays, no analog output, RS485 galvanic separated, support supply of sensor, batery backup, is marked as follows:

PMI-02 CTC02A20032SB

Direct ampermeter 4-20mA, power supply 230VAC, no relay, analog output 0-10V, without serial line, with supporting supply of the device, without batery, is marked as follows:

PMI-02 ADC08A0V302S0

Mechanic properties:

Coverage:	IP54
	IP65 - with optional cover
Material:	Noryl (non flamable)
Dimensions [WxHxT]:	96 x 48 x 150 mm
Panel slit:	43,5 x 90,5 mm
	(with hole 3 in corners)