



pH-4122.P pH/ORP-meter industrial two-channel



Industrial two-channel pH-meter pH-4122.P is designed for measuring of the hydrogen ions activity (pH) or redox potential (ORP) and temperature (t) of the analyzed liquid in one or two channels.

pH-meter provides a digital display and graphical display of the measured values of pH, ORP and temperature, their proportional conversion to standard analog output DC signals, data exchange with a computer

via digital interface RS-485 and archiving of the measured parameters, as well signaling the exit of measured parameters, including temperature, beyond the specified values. pH-meter can be equipped with a hydraulic panel HP 4131.2.

Scope of application: heat power industry, chemical, petrochemical, food processing, brewing and other industries.

BASIC TECHNICAL SPECIFICATION AND PARAMETERS

Measuring channels quantity.....	1, 2
Parameters being measured in every channel.....	pH or ORP and temperature
pH measuring range.....	0..14
ORP measuring range.....	(-1500..+1500) mV
Analyzed liquid temperature range.....	look section Electrodes: Combined pH and ORP
Analyzed liquid flow range.....	(0,9..48) l/h
Type of MI body.....	wall or panel mounting
Type of MI indicator.....	LCD graphics
Electrode system (ES).....	combination pH electrode, combination ORP-electrode
Basic absolute error value limit:	
- measuring pH complete with ES.....	± 0,05 pH
- measuring ORP.....	±2 mV
- measuring temperature.....	± 0,5°C
Length of the cable to the electrode.....	usual 4m (max 25m - depend from cable type)
Output signals parameters:	
-two analog, programmable.....	(0..5), (0..20) or (4..20) mA
-one interface.....	RS-485, ModBus RTU data communications protocol
-4 discrete (for wall mount body).....	switching over dry contact, 240V, 3A
-eight discrete (with module DoM-8.2).....	switching over dry contact, 240V, 3A
-Self cleaning or self calibrating function.....	switching over dry contact, 240V, 3A
-Self check.....	switching over dry contact, 240V, 3A
-Hold mode under calibrating or cleaning.....	switching over dry contact, 240V, 3A
Setting Alarm range for pH and temperature.....	in the whole measuring range
Archiving interval.....	1 sec
Archiving time (range).....	up to 1 year
Power supply voltage.....	~(100..240) V, (50..60) Hz
Power consumption.....	max 15VA
Climatic version:.....	T=(+5..+50)°C
Dust and water protection:.....	IP65
Resistance to mechanical influences.....	N2
Enclosure material:.....	ABS plastic
Weight.....	max 1,6kg

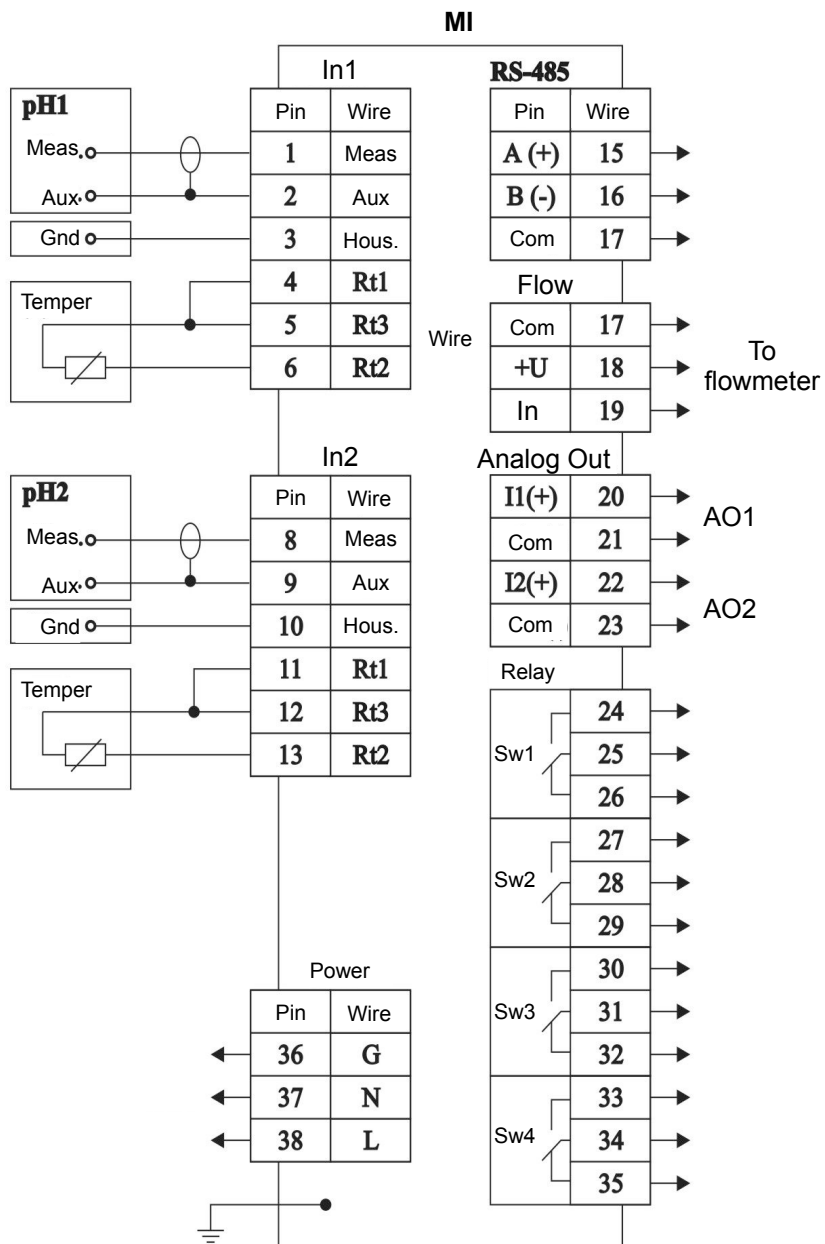
ORDER REFERENCE CODE:

To place an order, use the order reference in the description of pH-4101 and the questionnaire.

ACCESSORIES

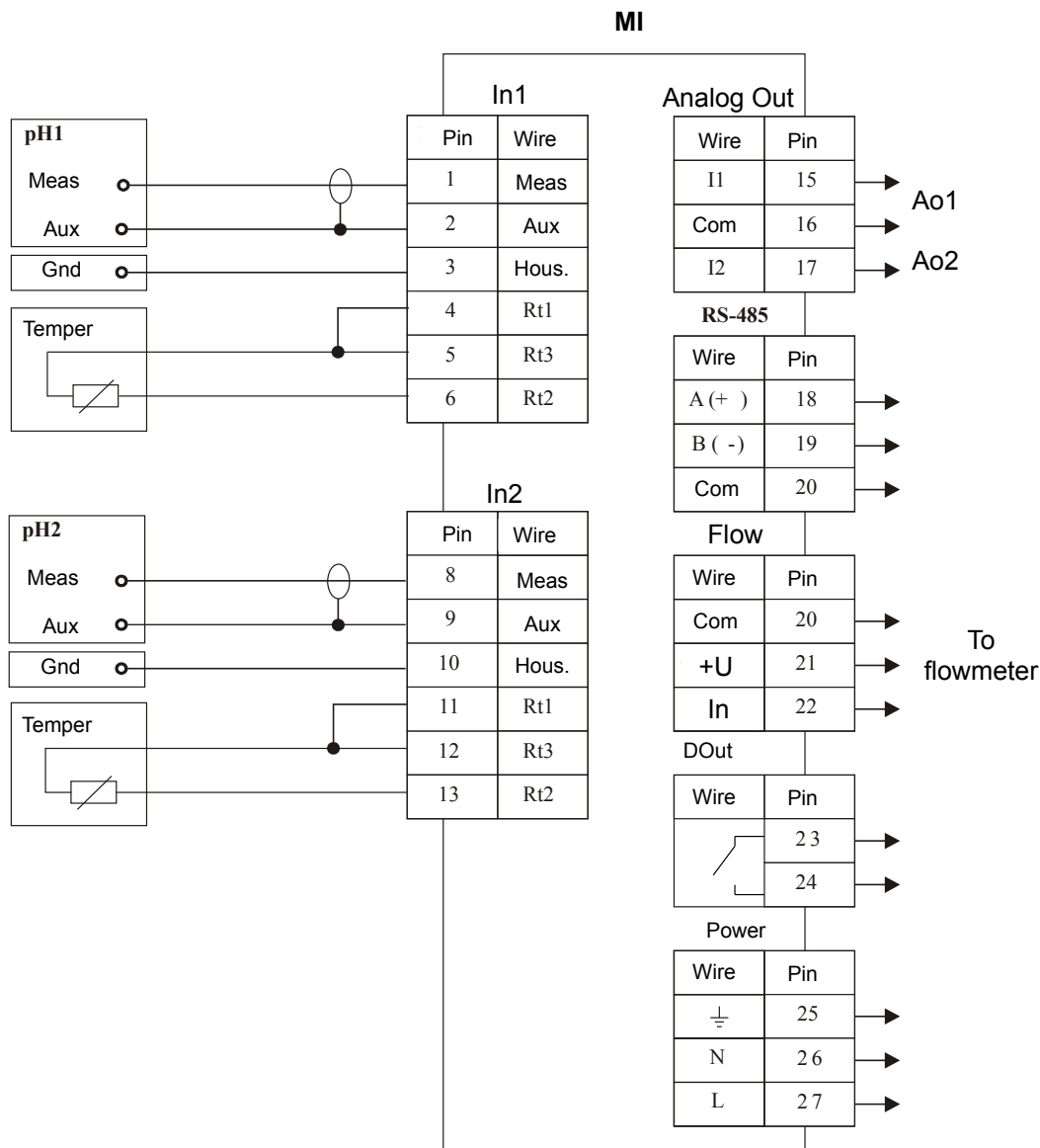
- combination electrode (see section "**Combination pH and ORP electrodes**»);
- holders for pH-electrodes installation (see section "**Holders for sensors**");
- hydraulic panel HP4131;
- pH-metric cable.

EXTERNAL WIRING



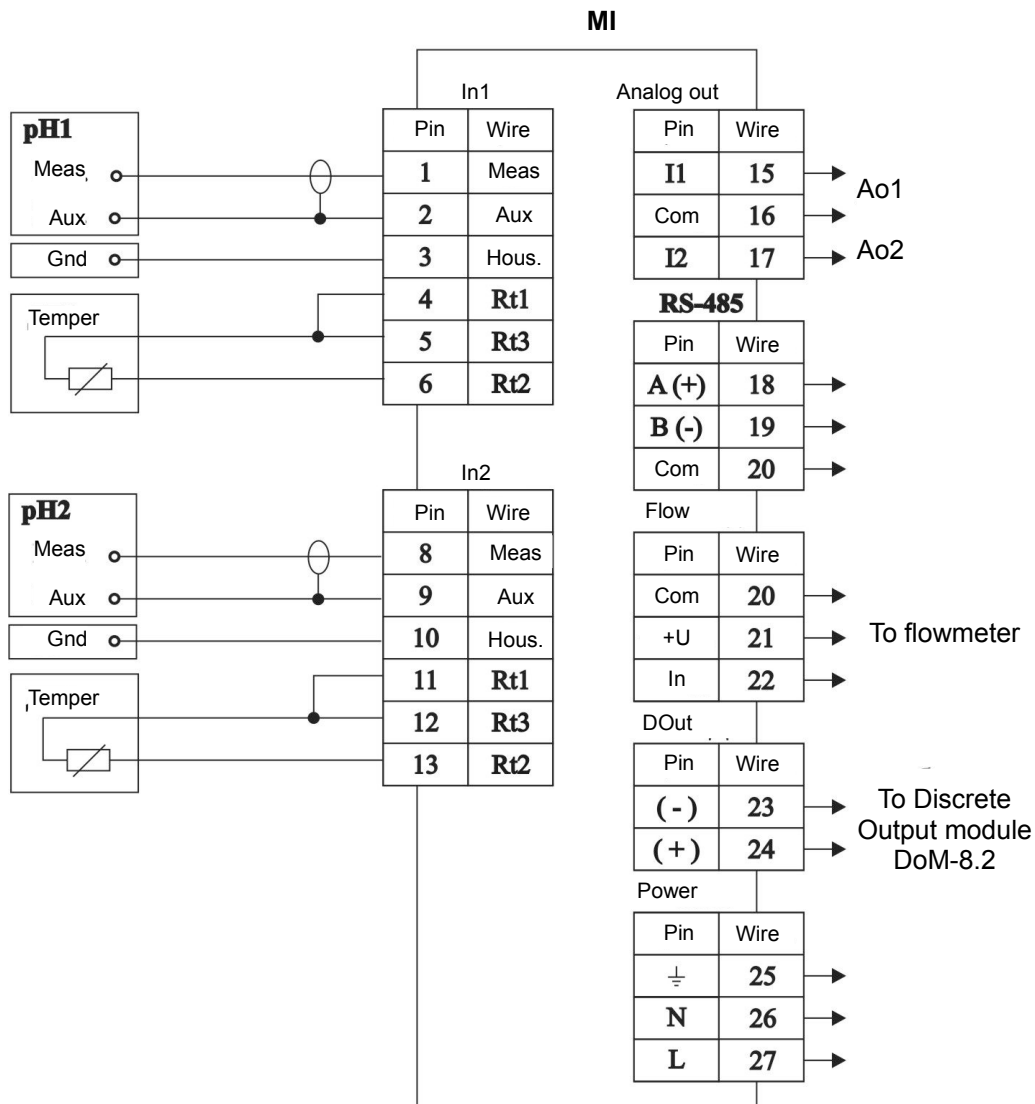
MI — measuring instrument;
Meas - measuring electrode;
Aux — auxillary electrode;
Temper — temperature sensor;
Gnd — grounding electrode (possible use the holder)
pH1,pH2 — combine electrodes, also can be used separated Measuring and Aux electrodes

Figure 1. Scheme of external connections of a panel-mounting version of pH meter



MI — measuring instrument;
Meas - measuring electrode;
Aux — auxillary electrode;
Temper — temperature sensor;
Gnd — grounding electrode (possible use the holder)
pH1,pH2 — combine electrodes, also can be used separated Measuring and Aux electrodes

Figure 2. Scheme of external connections of a wall-mounting version of pH meter with one discrete output



MI — measuring instrument;
Meas - measuring electrode;
Aux — auxillary electrode;
Temper — temperature sensor;
Gnd — grounding electrode (possible use the holder)
pH1,pH2 — combine electrodes, also can be used separated Measuring and Aux electrodes

Figure 3. Scheme of external connections of a wall-mounting version of pH meter with external output module

OVERALL AND ENCLOSURE DIMENSIONS

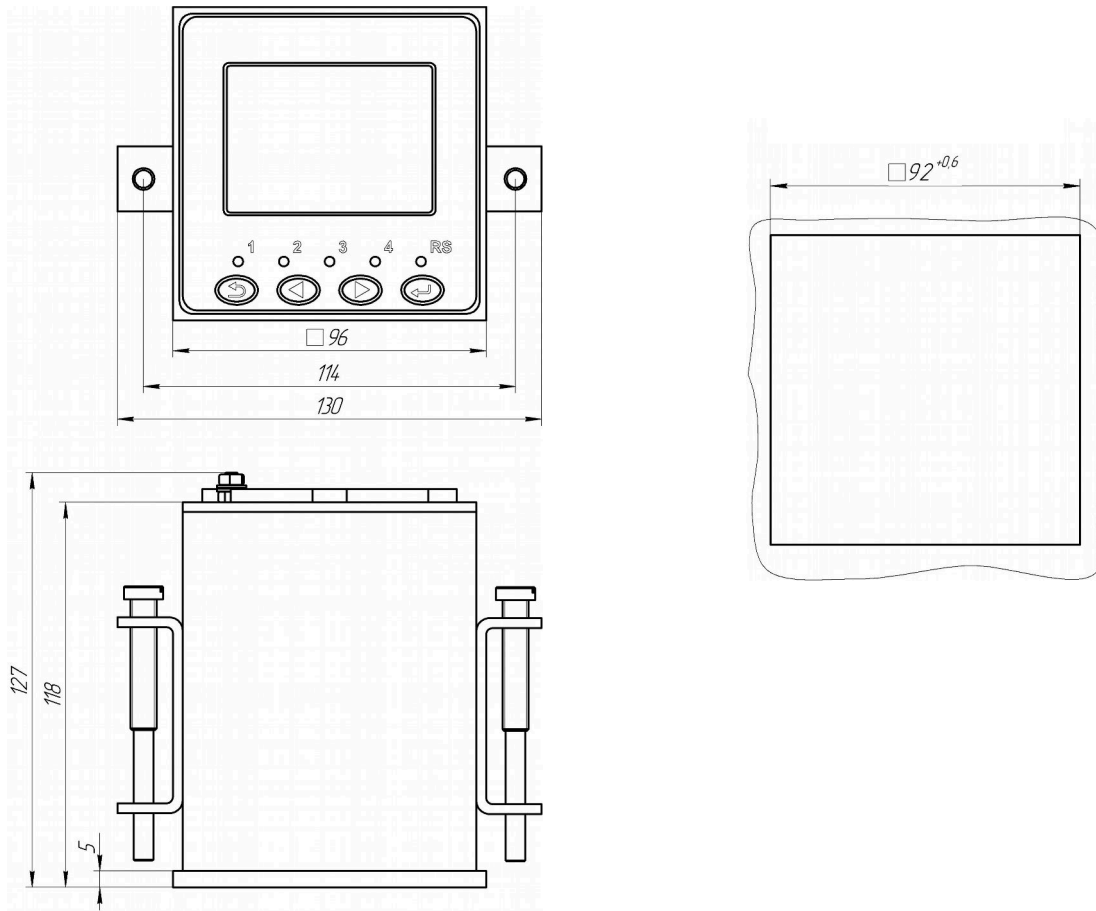


Figure 4. Measuring instrument panel version.

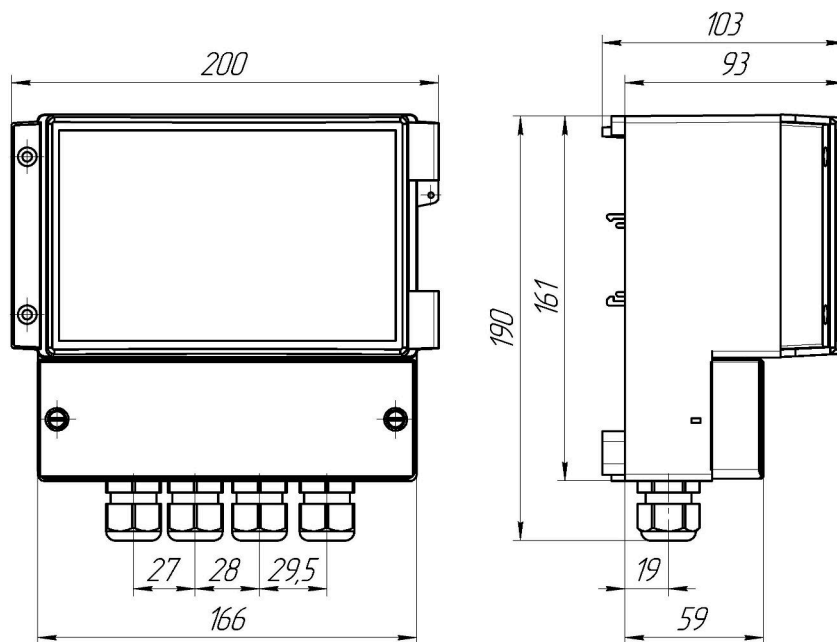


Figure 4. Measuring instrument wall-mounting version.