Online pH ORP Indicating Controller Transmitter
MS pH 97 (Origin USA) (Panel Mounted)



FEATURE

- Advanced Embedded Microcontroller Based Design
- Can be connected to pH or ORP electrodes
- Multivariable Display for Process Value, Relay Status, Temperature & 4 to 20 mA output
- Easy Front Key Calibration
- Auto / Manual Temperature Compensation
- Set Point – 4 Nos
- 3.2-inch LCD display
- 4 to 20 mA DC Isolated Output for pH or ORP
- Password can be Set
- Weatherproof IP 66 Protection

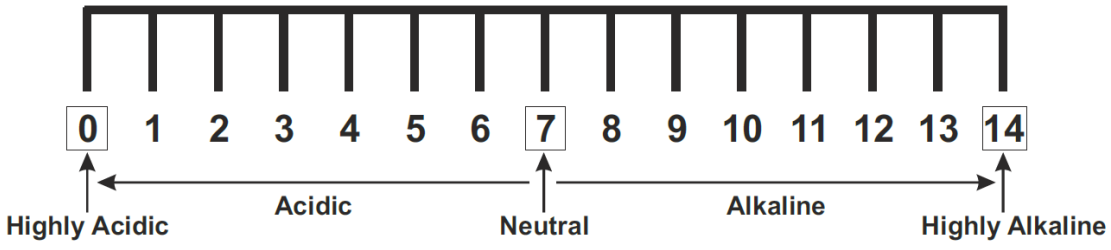
DESCRIPTION

MicroSet pH ORP Indicating Controller Transmitter Model MS pH 97 is used for various industrial applications. MS pH 97 is a convenient and cost-effective solution for monitoring and maintaining pH or ORP value. It can accept input from any pH or ORP sensor. MS pH 97 output is in the form of Analogue 4-20 mA DC or MODBUS RS 485 RTU (Optional). Online pH ORP indication provided through LCD display is easily readable. 2 Nos Relay Outputs are provided to operate Alarm, Solenoid Valve, Pump etc. 4 Nos Setpoints for Relays can be programmed using Frontal Keypad.

PRINCIPLE

Why pH Measurement is required?

To check the acidic or alkaline nature of aqueous solution. pH (Potential Hydrogen) is unit of measurement, used to determine the Acidity or Alkalinity of an aqueous solution. Practical pH scale for industrial instrumentation ranges from 0 to 14 pH. The acidic substances range from 0 to 6 and on the other end are the alkaline substances, which range from 8 to 14, with pH 7 being neutral, this is the pH of pure water which is neither very acidic nor very alkaline, is said to be neutral.



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How pH is measured?

Although everyone is familiar with Litmus paper, the only reliable way to measure pH is using Potentiometric Combination electrodes. These electrodes develop a millivolts output corresponding to pH value of solution which is directly proportional to the Free Hydrogen ion concentration in an aqueous Solution. These generated raw mill volts are fed to MS pH 97 where it is processed by amplifier & reading is displayed on meter

TECHNICAL SPECIFICATION

pH Range	: 0 - 14 pH
ORP Range	: ± 2000 mV
Temperature Range	: -10 to 150°C
pH Resolution	: 0.01 pH
ORP Resolution	: 1 mV
Temperature Resolution	: 0.1°C
pH Accuracy	: 0.1% FS or ± 0.01pH
ORP Accuracy	: ± 2 mV
Stability	: 0.05% of measuring range every 24 hours without accumulation pH
Repeatability	: Better than 0.1% of measuring range
Display	: 128*64, 3.2-inch graphic dot matrix LCD
Set Point	: 4 Nos
Calibration	: pH - 3 Point, ORP - 2 Point
Output	: Two SPST relays, Max. load 3A/250VAC, set high/low alarm, temp or clean control
Retransmission Output	: Isolated 4-20 mA DC for pH/ORP Max. load 1000Ω (RS 485 Optional)
Temperature Compensation	: Auto (PT-100), Manual (Adjustable 0 to 150°C)
Power Supply	: 100~240V 50/60Hz
Enclosure MOC	: ABS
Protection	: Weatherproof IP 66
Work Temperature	: 0～60℃, RH<95%, non-condensin
Storage Temperature	: -20～70℃, RH<55%, non-condensing
Mounting	: Panel Mounted
Electrical Interface	: Reserve three M12*1.5 gland
Dimensions	: 100 x 100 x120mm (Panel Cutout size 92X92mm)
Weight	: 0.45 kg
Power Consumption	: 3W

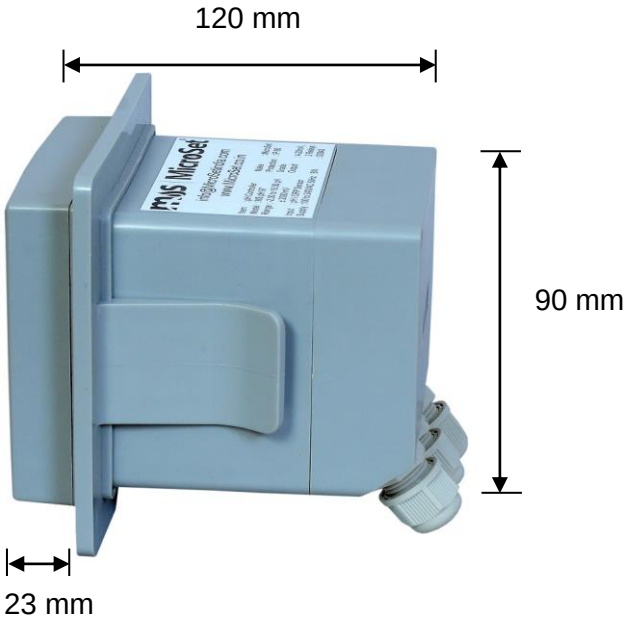
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APPLICATION

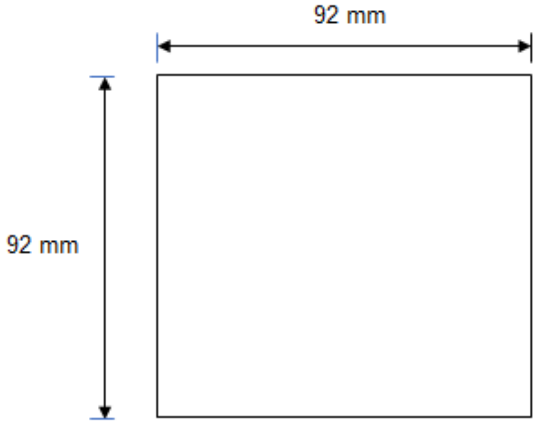
Water Treatment Plant (WTP)	Wastewater Treatment Plant (WWTP)
Effluent Treatment Plant (ETP)	Sewage Treatment Plant (STP)
RO Water Plant	Power Plant
Hydroponics	Chemical Industry
Textile Industry	Paper & Pulp
Beverages / Food Industry	Pharma Industry
Scrubber Application	Pigment Industry
Steel Industry	Aqua Culture

DIMENSION





PANEL CUTOUT DIMENSION



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TERMINAL DETAILS





CALIBRATION



Note : Due to continuous improvement in product, specifications & looks may vary

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