# Online Field Mounted pH ORP Indicating Transmitter – 2 Wire

## MS pH 211 T



## FEATURE

- Online Measurement
- Auto / Manual Temp Compensation
- 4-20 mA DC Output
- On-Line Indication through LCD Display
- Simple operating interface
- 2 Wire System
- Easy Installation

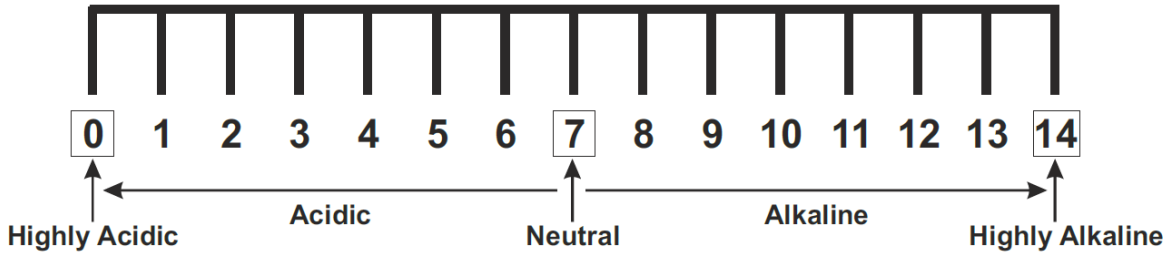
## DESCRIPTION

MicroSet pH Indicating Transmitter Model MS pH 211 T is used for various industrial applications. MS pH 211 T is a convenient and cost-effective solution for monitoring and transmitting pH or ORP value. It can accept input from any pH or ORP sensor. MS pH 211 T output is in the form of Analogue 4-20 mA DC two wire.

## 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 211 T where it is processed by amplifier & reading is displayed on meter

## TECHNICAL SPECIFICATION

| | |
|---|---|
| Type of Input | : From pH or ORP Electrode (Compatible to any make Electrode) |
| Type of Output | : 4 - 20 mA |
| Display | : LCD Display |
| Calibration Range | : pH : 0 to 14 pH, ORP : ± 2000mV |
| Calibration Points | : 3 Point |
| Temp Compensation | : RTD PT-100 / RTD PT-1000 |
| Accuracy | : pH : ± 0.01 pH, ORP : ± 3mV |
| Isolation | : 1.4 KV between Input, Output & Power Supply |
| Sensor Connection | : Through Terminals |
| Power Supply | : 24V DC Two Wire Loop Powered |
| Power Consumption | : < 50 mW |
| Repeatability | : ± 0.05% of Span, at 25°C |
| Response Time | : < 1000 mSec |
| Temp Coefficient | : ± 0.05% per °C |
| Electronic Protection | : Weather Proof IP 67 |
| Dimensions | : 155 mm (H) x 105 mm (W) X 130 mm (D) |
| Electrical Connections | : M20X1.5 (F) |
| Mounting | : 2” Pipe Mounting (2” U Clamp with Mounting Bracket Included) |
| Weight | : 1 kg (Approximate) |
| Ambient Conditions | : Temperature -20 to 55 °C / Humidity 5 to 95% Non-condensing |
| Housing MOC | : Cast aluminum with epoxy coating NEMA 4X |

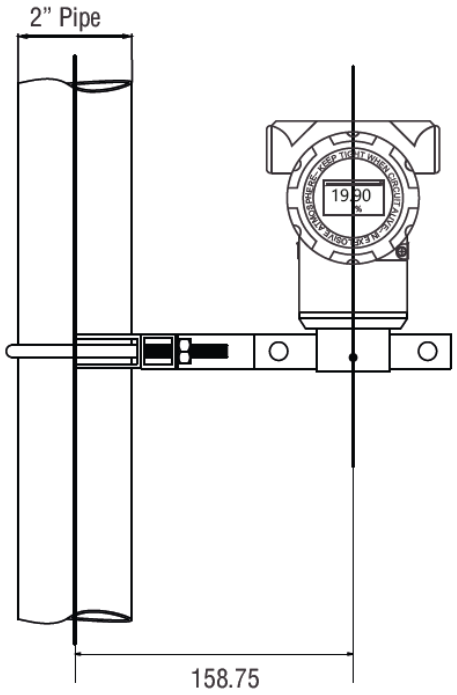
## APPLICATION

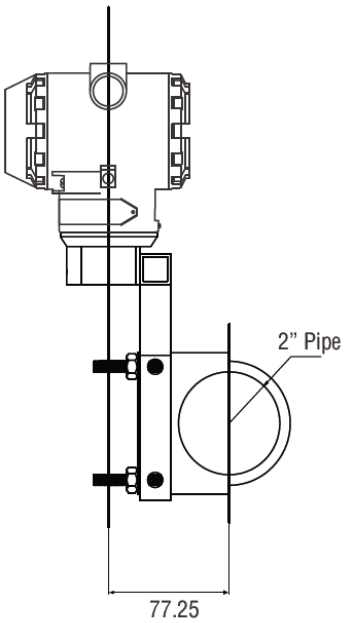
| | |
|---|---|
| Water Treatment Plant (WTP) | Wastewater Treatment Plant (WWTP) |
| Effluent Treatment Plant (ETP) | Sewage Treatment Plant (STP) |
| RO Water Plant | Power Plant |
| Hydroponics | Chemical Industry |
| Textile Industry | Paper & Pulp |
| Beverages / Food Industry | Pharma Industry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

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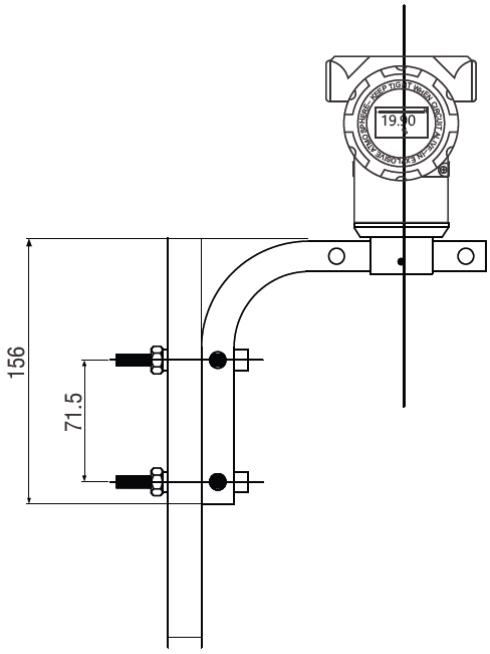
# INSTALLATION DIAGRAM

## PIPE MOUNTED




## WALL MOUNTED




Note : Due to Continuous Improvement, Specifications & Appearance may vary

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