Sensors

IOTRON™ Industrial pH/ORP Sensors



Rugged line of custom built-to-order analog & smart digital industrial pH & ORP sensors for inline, immersion & submersible, twist lock quick-disconnect, valve retractable and sanitary installations for wide range of applications including process that contain slurry & viscous solutions, sulfides, high temperatures, organic solvents, HF etching bath and wastewater treatment systems.

Unique features include low-profile break-resistant parabolic thick-wall pH glass elements for abrasives and solid-state non-porous conductive polymer reference systems. Special extreme dehydration resistant reference option for allows for intermittent wet & dry use and prolonged exposure to air without drying out. Smart digital configurations can be precalibrated to support seamless hot-swap plug and play exchange of sensors with waterproof NEMA 6P rated snap connectors in the field without any user action required whatsoever

IOTRON™ Industrial Ion Selective (ISE) Sensors



Simple to use industrial ion selective measurement systems are supplied complete with smart digital ISE sensor and mating field instrumentation ready for immediate commissioning in the field. Only a periodic grab sample offset calibration is required in the field. No standard solutions are required at all for commissioning nor for ongoing maintenance.

Full graphical remote access over ethernet capabilities allow for convenient remote offset calibration from the field lab or workshop where grab samples are often analyzed. Special model AB 6100 fluoride ion selective sensor configuration supports strong acid cleaning to remove fouling from calcium and silicate precipitates as well as for use in strong acid fluoride etching baths even at elevated temperatures. Novel materials of construction and membrane fabrication technologies allow for operation of these ion selective sensor in aggressive process conditions which are required for heavy industrial service applications.

Industrial Conductivity Sensors



Industrial conductivity sensors for use up to 205 degrees Celsius and 500 psig suitable for measurements from 0.055 microSiemens and up to 2,000 milliSiemens. Applications supported include ultrapure water, strong acids, strong bases and concentrated electrolytes. Materials of construction include 316SS, Monel, Titanium, Hastelloy C-276 for electrodes and TEFLON, CPVC, KYNAR and PEEK for the insulator.

Cell constants available from 0.01 to 20.0 and anywhere in between are available to optimized precision for any range of interest. All conductivity sensor configurations are available in smart digital MODBUS RTU style to interface directly with any suitable mating PLC or SCADA or else complete with ASTI supplied instrumentation such as the multichannel smart touchscreen controllers. Supported units include both the measured microSiemens/cm (µS/cm) or milliSiemens/cm (mS/cm) as well as computed units of total dissolved solids (TDS) or salinity (PSU) and resistivity units of MegaOhms (MΩ) for ultrapure water applications.

Industrial Dissolved Oxygen (DO) Sensors



Rugged industrial dissolved oxygen (D.O.) sensors for inline, immersion & submersible, twist lock quick-disconnect, valve retractable and sanitary installations are completely insensitive to the presence of hydrogen sulfide (H2S) gas. Measurement ranges from 0-150 ppm & 0-1,500 percent (%) saturation supported. Ideal for continuous measurement in tough applications such as processes with abrasive slurries, high levels of organic and biological content as well as solutions with high turbidity & viscosity.

Percent saturation units computed based upon the measured dissolved oxygen ppm and temperature in conjunction with the user provided air pressure and salinity. Automated calibration is performed dry in air with no standard solutions required. Sensor include waterproof NEMA 6P rated snap connectors for seamless hot-swap plug & play operation in the field after recalibration or rebuilding of cell with no operator action required in the field for sensor exchange.

ZEUS™ Industrial pH & ORP Sensors



ZEUS™ pH SENSORS & ORP SENSORS TO SOLVE THE TOUGHEST INDUSTRIAL APPLICATIONS

ZEUS™ Industrial Grade pH sensors are designed and built with Extremely Rugged Construction to handle the Toughest Severe Service Process Inline, Immersion or Submersible Installations. Analog ZEUS™ pH sensors available in Universal configuration with temperature compensation & liquid earth solution ground only or else with integral conventional or 5-wire differential integral preamplifier configurations. Smart digital ZEUS™ pH sensor configuration interfaces the modular cost-effective intelligent 3TX-HiQ-pH digital pH/ORP transmitter. The ZEUS™ smart digital configuration is also available for ORP measurements. Both analog and smart digital configuration of the ZEUS™ sensors can support pressures up to 200 psig & temperatures up to 150 degrees Celsius. Inquire to factory to ensure suitability for your exact use.Smart Digital MODBUS RTU configuration of ZEUS™ pH & ORP sensors can be

directly interfaced to most modern PLC.