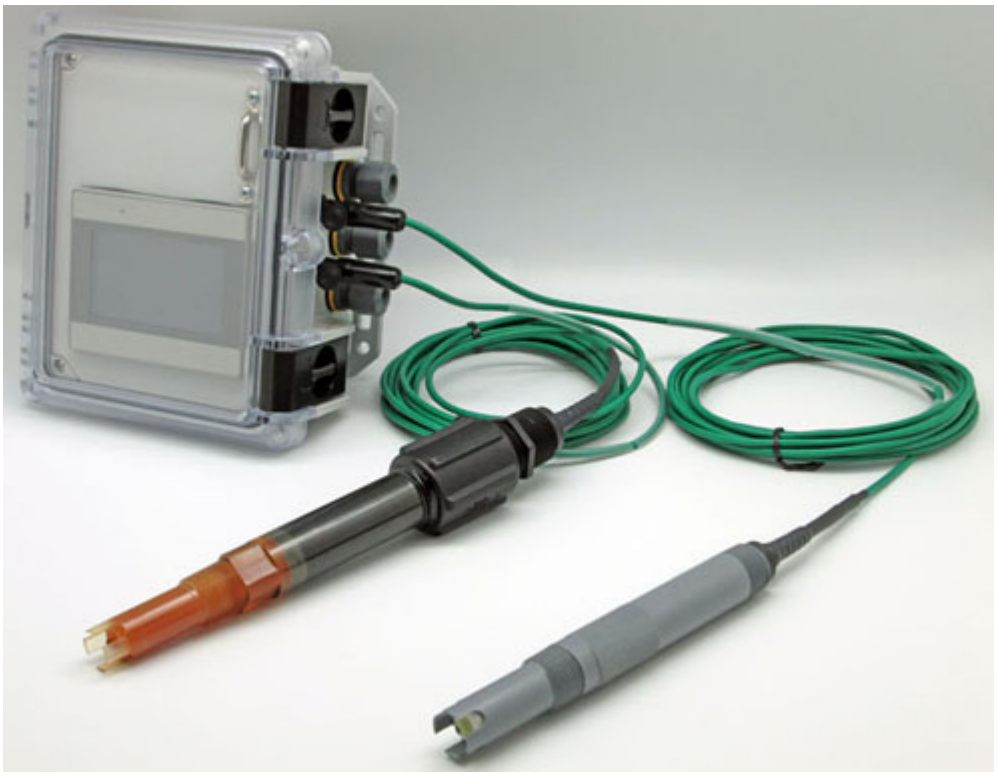
pH Sensors & ORP Sensors

Smart Digital MODBUS pH & ORP Sensors and Touchscreen Controllers





- Smart digital MODBUS RTU pH, ORP, Dissolved Oxygen (D.O.), Ion Selective (ISE) and Conductivity (EC) sensors always send out temperature compensated and calibrated process values
- Plug and play MODBUS RTU pH, ORP, Dissolved Oxygen (D.O.), Ion Selective (ISE) and Conductivity (EC) sensors can be hot-swapped in field. No special training is required for operators to change out sensors.
- Process values, calibrations and analytic information available via MODBUS RTU (a.k.a. as MODBUS over RS-485) or MODBUS TCP (a.k.a. MODBUS over Ethernet) when paired with touchscreen controllers
- Smart digital MODBUS RTU pH, ORP, Dissolved Oxygen (D.O.), Ion Selective (ISE) and Conductivity (EC) sensors can be connected to any PLC that can act as the MODBUS RTU master. No local transmitter is required if not desired (direct to PLC or SCADA) and/or if a local HMI is already present at the installation site.
- Configurations are available which are suitable for use in hazardous Class I, Division II locations as well as Explosion-Proof EX areas with ATEX certifications.
- Menu-driven color touchscreen controller allows for intuitive interface to sensors including support for all calibration functions as well as setup of analog outputs (4-20mA or 0-10VDC), programmable contact relays, datalogging as well as email notifications for trigger events to allow for proactive maintenance.
- Full remote access capabilities to both the HMI for remote troubleshooting and monitoring as well as remote download of logged data mean significant savings for support and maintenance of commissioned sites

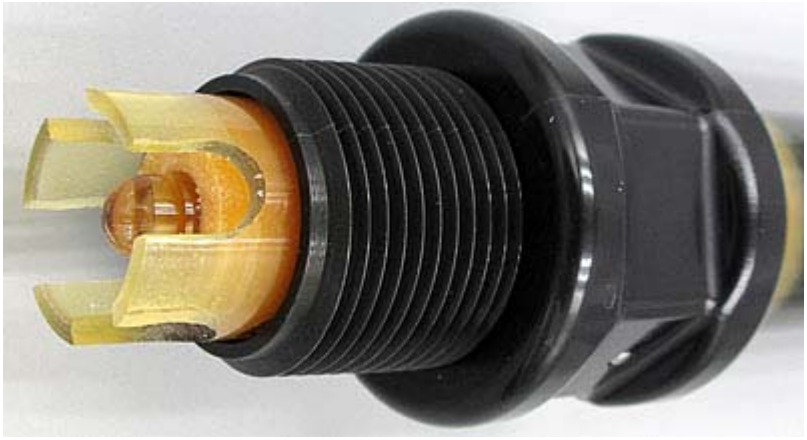
- Multichannel turn-key ready pH, ORP, Dissolved Oxygen (D.O.), Ion Selective (ISE) and Conductivity (EC) measurement and control systems up to 6 channels in a single package allow for very cost effective per channel costs without compromising any of the advanced Industrial Internet of Things (IIoT) feature set.
- Fast booting low power smart MODBUS RTU sensors are ideal fit for intermittent operation from remote wireless dataloggers running on batteries
- Compact battery powered handheld communicator allows for use of Smart digital MODBUS RTU pH, ORP, Dissolved Oxygen (D.O.), Ion Selective (ISE) and Conductivity (EC) sensors anywhere in the field for spot measurements as well as calibration & setup at any location of your choosing. Calibrations need not be performed out in the field with the instrumentation but rather at any location that is most convenient for the facility and staff.

Immersion pH & ORP Sensors



- Rugged line of 3/4″-3/4″ & 3/4″-1″ MNPT pH & ORP sensors for inline, immersion and fully submersible installation types in a wide range of plastic body housing materials
- Sensors are built to order and customized for specific application use
- Options include slurry/viscous, sulfide, high-temperature, dissolved chlorine and ammonia gas, and organic solvent resistant for severe service use.
- Support for up to 150 psig pressure and 150 degrees Celsius conditions

Twist Lock pH & ORP Sensors



- Twist lock configuration offers convenient insertion and removal from process with quick disconnect bayonet style installation
- Twist lock pH & ORP sensors are available with all of the same features and options as immersion sensor series for support of the same severe service applications
- Twist lock receptacle available in KYNAR (PVDF) as shown above & PEEK (not shown above) materials of construction for compatibility with most any possible installation. Sealing “O”-rings come standard in Viton-75 with CV75 Simriz 485or Kalrez 4079 as optional upgrades.

Hot-Tap Valve Retractable pH & ORP Sensors



- Rugged modular HOT-TAP valve retractable design allows for safe use at high pressures and temperatures with an insertion depth up to 41 inches.
- Available in 1.5 inch and 2.0 inch full port assembly versions. Robust blow-out protection standard and watertight insertion tube assembly.
- 316SS standard with alternate materials of construction upon request. Viton or Kalrez “O”-rings for sealing.
- Ideal for plants with installations that cannot be shut down for sensor insertion or removal and process systems where a slip-stream bypass is not possible.

Sanitary pH & ORP Sensors



- Sanitary pH & ORP sensors with solid-state reference technology are ideal for

aggressive food and beverage processes requiring chemical clean-in-place (CIP) support.

- Solid state reference is resistant to dehydration, chemicals, gases and other process conditions.
- Thick wall glass is resistant to cracking, even under high temperature and pressure conditions.
- Available with special “EXTREME” reference system to support prolonged exposure to dry conditions and for intermittent operation.
- Accurate pH glass is well suited for measurements requiring a high degree of precision.

IOTRON™ Custom built-to-order Smart Digital pH & ORP Sensors for Intelligent 3TX-HiQ-pH Digital Transmitters:

Smart Digital pH & ORP Sensors and Intelligent Digital pH/ORP Transmitters



- Simplify commissioning & maintenance with smart digital plug and play sensors & intelligent digital transmitters.
- Robust NEMA 6P rated snap connector makes exchange of sensors quick and easy for any field installation
- Calibration values are automatically loaded when sensor is connected without any user action required
- AComplete transmitter configuration can be downloaded or uploaded to smart digital sensor for cloning of transmitter setup, backup and/or reverting
- Tracks initial installation & last date in use, total service time and has complete sensor information stored to facillitate best practice management of sensor inventory, usage and procurement

ZEUS™ Analog and Digital pH & ORP Sensor Series:

ZEUS™ pH & ORP SENSORS



- Rugged Thick 1″-1.25″ MNPT pH sensors with RADEL sensor body housing for inline, immersion & submersible installations
- For slurry/viscous abrasives, sulfides, high-temperature, dissolved chlorine & ammonia gas, and compatible with most organic solvents
- Recommended for use in severe service use and tough process installations.
- Continuous use up to 200 psig inline pressure & 150 degrees Celsius
- Available in analog configurations without preamplifiers and with integral conventional or differential preamplifiers
- Available in smart digital configuration for use with 3TX-HiQ-pH intelligent transmitters