

Buffers and Calibration Standards

Conductivity Standards



Conductivity standards to mimic natural waters are available in quart containers. A wide range of standards from 23.8 uS to 30mS are available. NIST traceability certificates are also available upon request.

Part Numbers

TDS15	TDS300
TDS30	TDS1500
TDS150	TDS3000
TDS500	TDS15000
TDS1000	TDS30000

ORP Calibration Standards



Sensorex provides ORP calibration standards to check performance and aging of ORP electrodes. Simply make a solution of pH 4 or 7 buffer and add quinhydrone to get a stable mV solution. The B125 kit includes 1 pint each of pH 4.01 and pH 7 buffer and 2 plastic cups, 20 grams quinhydrone and measuring sticks. Also fixed pre-mixed Zobel and Lights solution are available.

Part #	Description
B125	ORP Kit
B225	Zobel Solution
B425	Lights Solution

pH Buffer Standards



Sensorex provides pH buffer standards for calibrating pH electrodes. Each buffer is packaged in either a pint or gallon container. All buffers are traceable to NIST standards. Optional NIST certificates are available for an additional fee upon request.

Part #	Buffer	Size
B104	pH 4.01	1 pint
B107	pH 7.0	1 pint
B110	pH 10.0	1 pint
B804	pH 4.01	1 gallon
B807	pH 7.0	1 gallon
B810	pH 10.0	1 gallon

Laboratory Products



Sensorex manufactures a complete line of laboratory electrodes for pH, ORP, Conductivity and Dissolved Oxygen. Request a copy of our laboratory electrodes catalog or visit our web site at <http://www.sensorex.com>.

Self Cleaning Flat Surface pH and ORP Electrodes



Toroidal Conductivity Sensors

Sensorex®

Sensors, Knowledge
and Experience
You Can Depend On

11751 Markon Drive
Garden Grove, CA 92841
Tel: (714) 895-4344
Fax: (714) 894-4839
Email: sales@sensorex.com

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Process Analytic Product Guide

- Flat Surface pH Electrodes
- Flat Surface ORP Electrodes
- General Use pH and ORP Electrodes
- Toroidal Conductivity Sensors
- Stainless Conductivity and Resistivity Sensors
- General Use Conductivity Sensors
- Dissolved Oxygen Sensors
- Free Chlorine and Chlorine Dioxide Sensors

Who We Are

With more than 37 years of experience, Sensorex is a recognized leader in high quality electrode manufacturing for industry. We offer pH, ORP (REDOX), Conductivity, Resistivity, Dissolved Oxygen and other specialty electrodes for a wide range of applications. Our sensing solutions are designed to solve problems and enhance measurement performance. For detailed specifications and data-sheets on any of our products, please visit our website at: <http://www.sensorex.com>.



With over 37 years serving industry, Sensorex provides knowledge and experience you can depend on.

Facility and Staff

Our modern 22,500 sq. ft. manufacturing facility allows us to develop and manufacture substantial volumes of sensors with consistent quality. In-house production and engineering laboratories support our manufacturing effort. Our technical staff has decades of practical experience in addition to technical expertise to support users with application assistance.

PRODUCTS

While we produce about 2000 sensors and products, our core business is comprised of:

- Flat Surface pH Electrodes
- Flat Surface ORP Electrodes
- General Use pH and ORP Electrodes
- Toroidal Conductivity Sensors
- Stainless Conductivity & Resistivity Sensors
- General Use Conductivity Sensors
- Dissolved Oxygen Sensors
- Free Chlorine and CLO2 Sensors

INDUSTRIES SERVED

- Water Treatment
- Wastewater
- Aquaculture
- Medical
- Electroplating
- Food and Beverages
- Printing
- Agriculture
- Semiconductor
- Refrigeration
- Cooling Towers
- Boilers
- Pulp and Paper
- Pharmaceutical
- Bio Technology

DO Sensors, DO Accessories, FCI and CLO2 Sensors

DO Sensors



The DO6400 and 7400 series dissolved oxygen sensors feature a large capacity electrolyte volume ideal for long term deployment in aquaculture and wastewater applications. Dependable galvanic technology with mV or 4-20mA outputs.

Model #	Description
DO6400 Series	Aquaculture Model
DO7400 Series	Wastewater Model

DO Accessories



DO sensor accessories including replacement membranes, installation tool and electrolyte are sold separately or as a convenient kits.

FCI and CLO2 Sensors



The CLD and FCL sensors feature amperometric measurement technology. Designed for use in water treatment disinfection applications and for use with chlorine dioxide or free chlorine, these sensors are available in two ranges 0-2 and 0-10 ppm of chlorine dioxide. Output is 4-20mA.

Model #	Description
CLD	Chlorine Dioxide Sensor
FCL	Free Chlorine Sensor
FC72	Flow Cell For Amperometric Sensor

Accessories

pH, ORP and Conductivity 4-20mA Interface



Sensorex provides a line of 2 wire 4-20 mA transmitters for use with PLC's and other 4-20mA input devices.

Part #	Description
PHMA	pH Transmitter
ORPMA	ORP Transmitter
TX100	pH Transmitter

pH and ORP Checkers



Part #	Description
C-110	pH/ORP Simulator
CX2	Inter-connect Cables for C110

pH Preamplifiers



Sensorex provides a wide range of preamplifiers for original equipment. Most preamplifiers are powered by the pH instrument and are supplied with simple installation instructions. Enclosures for preamplifiers are not provided.

Part Numbers
V1, V2, U698-03, SSA, LIA, GL90A, GL90B
V1-LN, UVA, U2587, ECI, PHMA, GF9030, PHAMP-1

Toroidal (Inductive) Conductivity Cells



Also known as inductive or non-contacting, the Sensorex toroidal conductivity cell provides a large measuring range of 0 -2000 mS (0 -2,000,000 uS) with a single sensor. These sensors require virtually no-maintenance, as there are no measuring elements in direct solution contact, which can be coated or fouled. Constructed of NORYL, they can be installed submersible or in our FC95C CPVC flow cell for in line installations.

Model #	Description
TCS3000, TCS3020	Series NORYL Toroidal Sensor
FC95C	2" Slip Fit CPVC Tee

Contacting Stainless Steel Cells



Sensorex manufactures a quality line of industrial grade stainless steel conductivity and resistivity sensors. Designed for demanding boiler applications or for hi-purity water and everything in between. Special versions with 1-1/2" and 2" tri-clover sanitary fittings are also available with or without ATC (automatic temperature compensation). Cell constants of 0.1, 1.0 and 10 are offered as standards. Special cell constants and configurations are available per request on a volume basis. Teflon or PEEK insulators are used depending on temperature/pressure requirements.

High Temperature Models Available

Model #	Description
CS650	Series 1/2" NPT Threads
CS675	Series 3/4" NPT Threads
CS676	Series 3/4" MPT Threads (Extra long 3" insertion depth)
CS615	Series 1" or 1.5" Tri-Clover
CS620	Series 2" Tri-Clover

General Use Conductivity Sensors



Our CS150 and CS200 12mm epoxy body conductivity/resistivity sensors feature graphite or platinum measuring surfaces. Available cell constants are 0.1, 1.0 and 10. Mounting in-line can be accomplished with use of our FC50P (1/2") or FC75P (3/4") mounting glands. The glands may be reversed and attached to a pipe for submersion mounting.

Model #	Description
CS150	Graphite, 12mm Epoxy Body
CS150TC	Graphite, 12mm Epoxy Body with ATC
CS200	Platinum, 12mm Epoxy Body
CS200TC	Platinum, 12mm Epoxy Body with ATC
FC50P	1/2" NPT Mounting Gland
FC75P	3/4" NPT Mounting Gland

8000 PLATFORM Flat Surface pH and ORP (REDOX) Electrodes



- Universally Compatible
- Modular Construction
- Self Cleaning

The S8000 series flat surface self cleaning electrode platform is designed for versatility and flexibility. You purchase only the components you need, and can adapt what you have to changing installation needs or interface options.

The sensor utilizes proven flat surface self cleaning technology. The reference system has been enhanced with Sensorex ERP technology. Heavy duty high temperature reference gels protects against thermal breakdown of the gel. A complex path protects the reference in the presence of interacting ions such as proteins, silver and sulfides that interact with silver or chloride.

The same electrode is used for in-line or submersion applications and is constructed in a chemically resistant PPS body.

Current installed S650CD submersion installations utilizing S653 or S653TC vintage cap/cables, can utilize an EA adapter to interface the new 8000 series sensor without replacing the original cable assembly.

There are 2 choices for new submersion installations. A simple cap cable submersion EA interface when no TC is required. For installations requiring solution grounds and/or ATC (automatic temperature compensation), the main EA interface should be used.

In-line mounting is accomplished using the main EA interface along with the FC800 flow cell. The main EA interface can be ordered with or without ATC elements.

For applications which require more than a direct electrode output, plug in electronic modules are available.



The first three available are:

- a. Battery powered unity gain module EM800
- b. Battery powered differential module EM801
- c. Blind 2 wire 4-20 mA transmitter EM802/pH or EM802/ORP

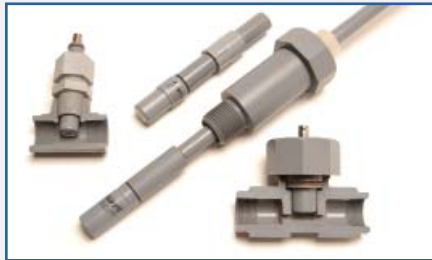
Cap/cables are available in two standard lengths, 10 feet and 25 feet. Both cap cable utilize an 8 pin connector.



Model #	Description
S8000CD	pH electrode
S8000CD-ORP	ORP electrode
S8000CD-HF	pH electrode HF resistant
S8000CD-LC	pH electrode low ionic
S8000CD-ORP-LC	ORP electrode low ionic
EA890	Adapts S653 cable assemblies
EA891	Submersion non TC adapter
EA899	in-line or submersion adapter requiring a solution ground.
EA899TC	in-line or submersion adapter with ATC and solution ground
EM800	Battery powered unity gain amp
EM801	Battery powered dif amplifier
EM802	2-wire 4-20 mA transmitter
S853/10	Cap Cable with coax for EA, EM parts, 10 foot
S853/25	Cap Cable with coax for EA, EM parts, 25 foot
S855/10	Cap Cable with coax + 6 conductors for EA, EM parts, 10 foot
S855/25	Cap Cable with coax + 6 Conductors for EA, EM parts, 25 foot
FC800	1.5" Slip Fit CPVC Flow Cell for In-line Installations
FC804	3/4" reduced CPVC Flow Cell for In-line Installations
FC801	Special dual sided reducer for FC800 flow cell. One side will adapt 1 inch NPT pipe and the other side will adapt 32mm metric pipe.

Flat Surface, Self-Cleaning pH and ORP Electrodes

Solve Coating and Abrasion Problems!



- Install electrodes in seconds without tools!
- Available in CPVC or KYNAR (PVDF)!
- Universally compatible with most makes and models of transmitters and controllers!
- Easy-to-clean flat-surface pH glass and platinum ORP surface!
- Problems solving models for ground loops, HF resistant pH and more!

Sensorex manufactures problem solving, time-saving pH and ORP electrodes that are self-cleaning in turbulent flow. The quick disconnect cartridge feature is a time-saver that has attracted many users to Sensorex over the past 25 years. Designed for nearly all pH and ORP applications, the rugged flat-surface cartridge design is also available in special configurations for applications with low ionic strength, for hydrofluoric acid and ground fault samples. Four convenient mounting styles are available to provide the optimal ease of use.



CPVC or PVDF materials of construction are available for to ensure solvent capability. All mounting hardware is available with or without ATC (automatic temperature compensation).

Submersible pH and ORP Electrodes



These submersible flat pH and ORP electrodes can improve performance in coating and other high maintenance applications.

Model #	Description
SS650CD	pH Electrode
S650CD-ORP	ORP Electrode
S650CDHF	HF resistant pH Electrode
DA650CD	Ground Loop pH Electrode
DA650CD-ORP	Ground Loop ORP Electrode
S653	Cap/Cable Assembly
S653W	Cap/Cable Assembly with HD Water Proof Cable
S653TC	Cap Cable with ATC Elements

By-pass/Side Stream pH and ORP Electrodes



This side stream flat pH and ORP electrode is designed for oily water applications. The special flow cell increases the velocity at the face of the flat electrode.

Model #	Description
S645CD	pH Electrode
S645CD-ORP	ORP Electrode
S645CDHF	HF Resistant pH Electrode
FC60C	Special Restrictor Flow Cell
S653	Cap/Cable Assembly
FC60TC	Special Restrictor Flow Cell with ATC

In-line Mounted pH and ORP Electrodes



Turbulent flow across the flat measuring surface can lengthen time between required service intervals. The electrodes can be removed from service with no tools and replaced in seconds if required. Three sizes are available depending on your pipe size requirements. Choose 3/4", 1" or 2" models.

Model	Model #
3/4" Lines	S660CD, S660CDHF, S660CD-ORP, DA660CD, FC66C, S653, FC66TC
1" Lines	S661CD, S661CDHF, S661CD-ORP, DA661CD, FC67C, S653, FC67TC
2" Lines	S662CD, S662CDHF, S662CD-ORP, DA660CD, FC68C, FC68TC, S653

Insertion Mounted pH and ORP Electrodes



Our insertion flat surface pH and ORP electrodes feature our quick disconnect designed cartridge and can be mounted in any direction, even upside down! Different length wet tap (insertion) assemblies are used to insert the electrode into the stream on large pipes or through tank sidewalls.

Model #	Description
S655CD	pH Electrode
S655CD-ORP	ORP Electrode
S675 (12" depth)	Insertion Assembly
S676 (18" depth)	Insertion Assembly
S677 (24" depth)	Insertion Assembly
S653	Cap/Cable Assembly
S675TC	Same as above with ATC
S676TC	Same as above with ATC
S677TC	Same as above with ATC
BV1	Full port 1" Ball Valve

General Use Series pH and ORP Electrodes

Economy and Quality!



- Saves Money - Affordable Designs
- Compatible with Most Meters
- Options for Difficult Applications

Threaded PVC In-line and Submersion Styles

The S260 Series provide an economical, multi-purpose solution for in-line or submersion applications. Ryton construction provides a durable economy package. Single and double junctions are available with bulb or flat glass pH surface. Best of all, the sealed gel filled design requires no maintenance.

Model #	Description
S265C	1/2" NPT pH Electrode
S265C-ORP	1/2" NPT ORP Electrode
S268CD	1/2" NPT Flat DJ pH Electrode
S267C	3/4" NPT pH Electrode
S267CD-ORP	3/4" NPT ORP Electrode
S269CD	3/4" NPT Flat DJ pH Electrode

The S270 series is a solid medium duty pH and ORP sensor with thick walled PPS construction. A step up from it's S260 counterparts, they feature double junctions standard on all models and HDPE primary junctions.

Model #	Description
S271CD 3/4" NPT	pH Electrode
S271CD-ORP 3/4" NPT	ORP Electrode
S272CD 3/4" NPT	Flat pH Electrode

Cartridge Style



LOW COST Cartridge - type electrodes incorporate the same quick disconnect cable assembly used in our popular industrial 600 series electrodes. Single and double junction designs use a sealed, gel filled design. Select either pH or ORP. Use with our gland fitting for in-line measurement.

Model #	Description
SS222C	pH Electrode
S222C-ORP	ORP Electrode
S222CD	Double Junction pH Electrode
FC50P	1/2" MNPT Mounting Gland
FC75P	3/4" MNPT Mounting Gland

Gland Mounting Styles



Versatile polypropylene gland fittings are available to mount our 200 series electrodes into standard pipe "T" fittings. The glands are reusable, and handle temperatures of 100 degrees C at 100 psig. Select either 1/2" or 3/4" NPT male threads. Stainless steel gripper rings permit the electrode to be positioned anywhere along it's body.

Model #	Description
FC50P	1/2" MNPT Mounting Gland
FC75P	3/4" MNPT Mounting Gland