

## S8000 pH & ORP SYSTEMS

PRODUCT SPECIFICATION SHEET

Customizable packages reduce total cost of ownership

Reliable performance in demanding applications

Configuarable for in-line or submersion use

Self-cleaning, flat surface design

#### Perfect for pressurized applications

The S8000 series flat surface self-cleaning electrode platform is designed for versatility and flexibility. You purchase only the components that you need and can adapt what you have to changing interface or application requirements.

The pH and ORP sensors provide reliable performance in demanding applications, including pressurized applications, by utilizing Sensorex's proven flat surface technology. Liquid flow naturally cleans the flat sensor surface, reducing maintenance and downtime. When the sensors need to be replaced, install a replacement cartridge in seconds with no tools or rewiring required. For applications involving heavy metals, proteins, silver, or sulfides, Sensorex's ERP technology provides a complex path that protects the reference cell and prevents contamination. Heavy duty high temperature reference gels offer protection against thermal breakdown, while a PPS body allows for durability in a range of chemical environments.

For applications that require more than a direct electrode output, plug-in electronic modules are available. Caps/cables are stocked and ready to ship in two standard lengths, 10 feet and 20 feet. Special cable lengths are also available.





pH & ORP sensor cartridges & quick change replacements



Electrode adapters with optional built-in ATC



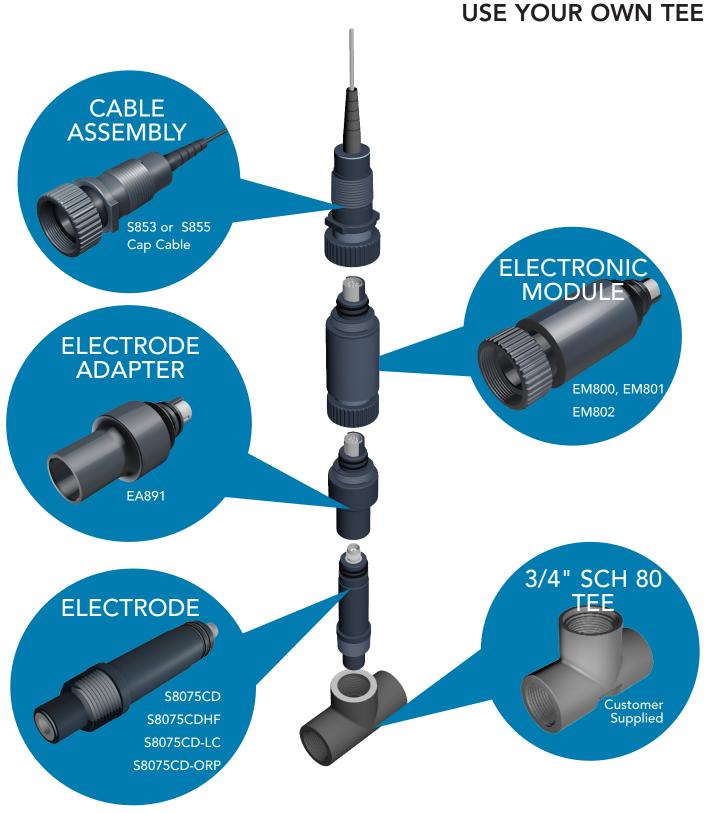
Optional electronic modules amplifier, transmitter



Cable assemblies - 10ft, 20ft or custom length



# BUILD YOUR \$8000 MODULAR pH/ORP SYSTEM:





### **S8000 MODULAR SYSTEMS**

PRODUCT SPECIFICATION SHEET

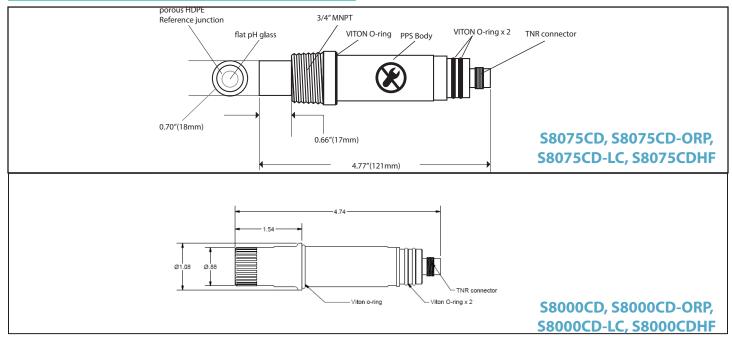
#### **SPECIFICATIONS**

pH Range	0 - 14pH (0-12.3pH with low Na+ ion error)
Temperature Range	0-100°C, de-rated under pressure 0-80°C when mounted in flow cell 70°C with submerged electronic module
Pressure Range	0-100 psig (7.5 Bar), de-rated under temperature
Reference Type	Double Junction, Sensorex ERP System

#### **OPTIONAL MODELS**

ORP Redox Electrode	-2000mV to +2000mV
HF Resistant pH Electrode	0-12pH, 0-50°C, <2% HF by volume
Low Ionic Models	For solutions of <100uS/cm conductivity
EM802-pH	0-14pH = 4-20mA
EM802-ORP	-1000  to  +1000 mV = 4-20 mA

#### **OUTLINE AND DIMENSIONS**



#### pH & ORP ELECTRODE ORDERING INFORMATION

#### Part Number Description

S8000CD	Flat surface pH elecrode cartridge S8000 Series, Ryton body, double junction reference
S8000CD-ORP	Flat surface ORP elecrode cartridge S8000 Series, Ryton body, double junction reference
S8000CDHF	Flat surface pH elecrode cartridge S8000 Series, HF resistant, Ryton body, double junction reference
\$8000CD-LC	Flat surface pH elecrode cartridge S8000 Series, for low conductivity water (<100uS), Ryton body, double junction reference
S8075CD	Flat surface pH elecrode cartridge S8000 Series, Ryton body, double junction reference, integrated 3/4" NPT threads
S8075CD-ORP	Flat surface ORP elecrode cartridge S8000 Series, Ryton body, double junction reference, integrated 3/4" NPT threads
S8075CDHF	Flat surface pH elecrode cartridge S8000 Series, HF resistant, Ryton body, double junction reference, integrated 3/4" NPT threads
S8075CD-LC	Flat surface pH elecrode cartridge S8000 Series, for low conductivity water (<100uS),Ryton body, double junction reference, integrated 3/4" NPT threads

#### **ELECTRODE ADAPTER ORDERING INFORMATION**

Part Number	Description
EA890	Electrode adapter, retrofits S8000 to old S653 cable.
EA891	Electrode adapter, submersion mount, no temperature compensation. Use with cable S853.
EA899	Electrode adapter, submersion or in-line mount, no temperature compensation, with solution ground. Use with cable S855.
EA899TC	Electrode adapter, submersion or in-line mount, with temperature compensation and solution ground. Use with cable S855. Specify temperature compensation.

#### **ELECTRONIC MODULE ORDERING INFORMATION**

Part Number Description	
EM800	Battery-powered, unity gain amplifier. Use for cable length >30ft only. Use with S853, or S855 cable when using EA899TC.
EM801	Battery-powered, differential amplifier. Requires Electrode adapter EA899 or EA899 TC. Use with S853 or S855 cables.
EM802-pH	24V DC-powered, 4-20mA pH transmitter module. Requires Electrode adapter EA899/TC or EA891 Use with S853 cable.
EM802-ORP	24V DC-powered, 4-20mA ORP transmitter module. Requires Electrode adapter EA899 or EA891. Use with S853 cable.

#### **CABLE ASSEMBLY ORDERING INFORMATION**

Part Number	Description
S853/10/"X"	Coaxiable cable assembly for S8000 Series., 10ft cable length. Specify connector in place of "X"
S853/20/"X"	Coaxiable cable assembly for S8000 Series., 20ft cable length. Specify connector in place of "X"
\$855/10/"X"/"Y"	Coaxiable cable assembly + 3 wire (R, G, B) S8000 Series, 10ft cable length. Specify pH connector in place of "X", TC connector in place of "Y"
\$855/20/"X"/"Y"	Coaxiable cable assembly $+$ 3 wire (R, G, B) S8000 Series, 20ft cable length. Specify pH connector in place of "X", TC connector in place of "Y"
10ft and 20ft cables are in stock. Other cable lengths can be made. Consult Sensorex for details.  Cable Connector Choices: BNC, Tinned lead ("-TL"), Spade Lug ("SL")	

#### FLOW CELL ORDERING INFORMATION

Part Number	r Description
FC800	Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.5" Slip connection.
FC805	Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.0" FNPT
FC95C	Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 2.0" Slip connection.
FC806	Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.0" Slip connection.
FC875/T	Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 3/4" MNPT connection.
FC875/S	Flow cell, CPVC for \$8000 Series. Fits EA899 or EA899TC electrode adapters, 3/4" slip/socket connection.

#### PRE-CONFIGURED KITS ORDERING INFORMATION

Part Number	Description
S8100/10/BNC	Kit, S8000CD + EA891 + S853/10/BNC (Submersion mount pH, no ATC), 10ft cable, BNC connector.
S8100-ORP/10/BNC	Kit, S8000CD-ORP + EA891 + S853/10/BNC (Submersion mount ORP), 10ft cable, BNC connector
S8100TC/10/BNC/TL	$\label{eq:Kit,S8000CD} \textbf{Kit,S8000CD} + \textbf{EA899TC/P1K} + \textbf{S855/10/BNC/TL} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)} \\ \textbf{(Submersion mount pH with ATC, 10ft cable, BNC connector, BNC connector, PT1000 TC type)} \\ (Submersion mount pH with ATC, 10ft cable, BNC connector, BNC c$
S8200/10/BNC	Kit, S8000CD + EA899 + FC800 + S853/10/BNC (In line pH, no ATC, 1.5" Flow cell, 10ft cable, BNC connector
S8200-ORP/10/BNC	Kit, S8000CD-ORP + EA899 + FC800 + S853/10/BNC (In line ORP, 1.5" Flow cell, 10ft cable, BNC connector
\$8200TC/10/BNC/TL	$\label{eq:Kit,S8000CD} Kit, S8000CD + EA899TC/P1K + S855/10/BNC/TL (In line mount pH with ATC, 1.5" Flow cell, 10ft cable, BNC connector, PT1000 TC type)$
S8300/10/BNC	Kit, S8000CD + EA899 + FC875/T + S853/10/BNC (In line pH, no ATC, 3/4" Flow cell, 10ft cable, BNC connector
S8300TC/10/BNC/TL	$\label{eq:Kit,S8000CD} \textbf{Kit,S8000CD} + \textbf{EA899TC/P1K} + \textbf{FC875/T} + \textbf{S855/10/BNC/TL} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ \textbf{(In line pH, with ATC, 3/4" Flow cell, 10ft cable, BNC connector, PT 1000 TC type} \\ (In line pH, with ATC, 3/4" Flow cell,$

#### **OUTLINE AND DIMENSIONS**

# **S8000CD + EA899TC S8300TC/10/BNC/TL** + S855 + FC804/FC805/FC806 3/4" NPT --3/4" NPT -10.05" (255 mm) 10.35 Ø2.86 $\Leftrightarrow$ 3 34" (85 mm) 3.51 Ø2.33 3.82" (97 mm) -5.18-