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.

Customizable packages reduce total cost of ownership
Reliable performance in demanding applications
Configurable for in-line or submersion use
Self-cleaning, flat surface design
Perfect for pressurized applications

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 S8000 MODULAR pH/ORP SYSTEM

CABLE ASSEMBLY
S853 or S855 Cap Cable

ELECTRONIC MODULE
EM800, EM801, EM802

FLOW CELL (inline only)
FC800 - 1.5" Slip
FC875/T - 3/4" NPT
FC875/S - 3/4" SLIP

ELECTRODE
S8000CD
S8000CDHF
S8000CD-LC
S8000CD-ORP

ELECTRODE ADAPTER
EA890
EA891
EA899 or EA899TC

DESIGNED AND ASSEMBLED IN CALIFORNIA, USA
11751 MARKON DRIVE • GARDEN GROVE, CA 92841 • 714.895.4344 • WWW.SENSOREX.COM
© Sensorex Corporation. All rights reserved. In the interest of improving and updating its equipment, Sensorex reserves the right to alter specifications to equipment at any time.
BUILD YOUR S8000 MODULAR pH/ORP SYSTEM:
USE YOUR OWN TEE

CABLE ASSEMBLY
S853 or S855 Cap Cable

ELECTRODE ADAPTER
EA891

ELECTRODE
S8075CD
S8075CDHF
S8075CD-LC
S8075CD-ORP

ELECTRONIC MODULE
EM800, EM801, EM802

3/4" SCH 80 TEE
Customer Supplied

DESIGNED AND ASSEMBLED IN CALIFORNIA, USA
11751 MARKON DRIVE • GARDEN GROVE, CA 92841 • 714.895.4344 • WWW.SENSOREX.COM
© Sensorex Corporation. All rights reserved. In the interest of improving and updating its equipment, Sensorex reserves the right to alter specifications to equipment at any time.
# S8000 Modular Systems

## Product Specification Sheet

### Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S8000CD</td>
<td>Flat surface pH electrode cartridge S8000 Series, Ryton body, double junction reference</td>
</tr>
<tr>
<td>S8000CD-ORP</td>
<td>Flat surface ORP electrode cartridge S8000 Series, Ryton body, double junction reference</td>
</tr>
<tr>
<td>S8000CDHF</td>
<td>Flat surface pH electrode cartridge S8000 Series, HF resistant, Ryton body, double junction reference</td>
</tr>
<tr>
<td>S8000CD-LC</td>
<td>Flat surface pH electrode cartridge S8000 Series, for low conductivity water (&lt;100uS/cm), Ryton body, double junction reference</td>
</tr>
<tr>
<td>S8075CD</td>
<td>Flat surface pH electrode cartridge S8000 Series, Ryton body, double junction reference, integrated 3/4” NPT threads</td>
</tr>
<tr>
<td>S8075CD-ORP</td>
<td>Flat surface ORP electrode cartridge S8000 Series, Ryton body, double junction reference, integrated 3/4” NPT threads</td>
</tr>
<tr>
<td>S8075CDHF</td>
<td>Flat surface pH electrode cartridge S8000 Series, HF resistant, Ryton body, double junction reference, integrated 3/4” NPT threads</td>
</tr>
<tr>
<td>S8075CD-LC</td>
<td>Flat surface pH electrode cartridge S8000 Series, for low conductivity water (&lt;100uS/cm), Ryton body, double junction reference, integrated 3/4” NPT threads</td>
</tr>
</tbody>
</table>

### Optional Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORP Redox Electrode</td>
<td>-2000mV to +2000mV</td>
</tr>
<tr>
<td>HF Resistant pH Electrode</td>
<td>0-12pH, 0-50°C, &lt;2% HF by volume</td>
</tr>
<tr>
<td>Low Ionic Models</td>
<td>For solutions of &lt;100uS/cm conductivity</td>
</tr>
<tr>
<td>EM802-pH</td>
<td>0-14pH = 4-20mA</td>
</tr>
<tr>
<td>EM802-ORP</td>
<td>-1000 to +1000mV = 4-20mA</td>
</tr>
</tbody>
</table>

### Outline and Dimensions

<table>
<thead>
<tr>
<th>Component</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH Range</td>
<td>0 - 14pH (0-12.3pH with low Na+ ion error)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>0-100°C, de-rated under pressure</td>
</tr>
<tr>
<td>Pressure Range</td>
<td>0-100 psig (7.5 Bar), de-rated under temperature</td>
</tr>
<tr>
<td>Reference Type</td>
<td>Double Junction, Sensorex ERP System</td>
</tr>
<tr>
<td>pH &amp; ORP Electrode Ordering Information</td>
<td></td>
</tr>
</tbody>
</table>

© Sensorex Corporation. All rights reserved. In the interest of improving and updating its equipment, Sensorex reserves the right to alter specifications to equipment at any time.
## Electrode Adapter Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA890</td>
<td>Electrode adapter, retrofits S8000 to old S653 cable.</td>
</tr>
<tr>
<td>EA891</td>
<td>Electrode adapter, submersion mount, no temperature compensation. Use with cable S853.</td>
</tr>
<tr>
<td>EA899</td>
<td>Electrode adapter, submersion or in-line mount, no temperature compensation, with solution ground. Use with cable S855.</td>
</tr>
<tr>
<td>EA899TC</td>
<td>Electrode adapter, submersion or in-line mount, with temperature compensation and solution ground. Use with cable S855. Specify temperature compensation.</td>
</tr>
</tbody>
</table>

## Electronic Module Ordering Information

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

## Cable Assembly Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S853/10/&quot;X&quot;</td>
<td>Coaxiable cable assembly for S8000 Series, 10 ft cable length. Specify connector in place of “X”.</td>
</tr>
<tr>
<td>S853/20/&quot;X&quot;</td>
<td>Coaxiable cable assembly for S8000 Series, 20 ft cable length. Specify connector in place of “X”.</td>
</tr>
<tr>
<td>S855/10/&quot;X&quot;/&quot;Y&quot;</td>
<td>Coaxiable cable assembly + 3 wire (R, G, B) S8000 Series, 10 ft cable length. Specify pH connector in place of “X”, TC connector in place of “Y”.</td>
</tr>
<tr>
<td>S855/20/&quot;X&quot;/&quot;Y&quot;</td>
<td>Coaxiable cable assembly + 3 wire (R, G, B) S8000 Series, 20 ft cable length. Specify pH connector in place of “X”, TC connector in place of “Y”.</td>
</tr>
</tbody>
</table>

10 ft and 20 ft 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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC800</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.5” Slip connection.</td>
</tr>
<tr>
<td>FC805</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.0” FNPT</td>
</tr>
<tr>
<td>FC95C</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 2.0” Slip connection.</td>
</tr>
<tr>
<td>FC806</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 1.0” Slip connection.</td>
</tr>
<tr>
<td>FC875/T</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 3/4” MNPT connection.</td>
</tr>
<tr>
<td>FC875/S</td>
<td>Flow cell, CPVC for S8000 Series. Fits EA899 or EA899TC electrode adapters, 3/4” slip/socket connection.</td>
</tr>
</tbody>
</table>
# Pre-Configured Kits Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S8100/10/BNC</td>
<td>Kit, S8000CD + EA891 + S853/10/BNC (Submersion mount pH, no ATC), 10ft cable, BNC connector.</td>
</tr>
<tr>
<td>S8100-ORP/10/BNC</td>
<td>Kit, S8000CD-ORP + EA891 + S853/10/BNC (Submersion mount ORP), 10ft cable, BNC connector</td>
</tr>
<tr>
<td>S8100TC/10/BNC/TL</td>
<td>Kit, S8000CD + EA899TC/P1K + S855/10/BNC/TL (Submersion mount pH with ATC, 10ft cable, BNC connector, PT1000 TC type)</td>
</tr>
<tr>
<td>S8200/10/BNC</td>
<td>Kit, S8000CD + EA899 + FC800 + S853/10/BNC (In line pH, no ATC, 1.5” Flow cell, 10ft cable, BNC connector)</td>
</tr>
<tr>
<td>S8200-ORP/10/BNC</td>
<td>Kit, S8000CD-ORP + EA899 + FC800 + S853/10/BNC (In line ORP, 1.5” Flow cell, 10ft cable, BNC connector)</td>
</tr>
<tr>
<td>S8200TC/10/BNC/TL</td>
<td>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)</td>
</tr>
<tr>
<td>S8300/10/BNC</td>
<td>Kit, S8000CD + EA899 + FC875/T + S853/10/BNC (In line pH, no ATC, 3/4” Flow cell, 10ft cable, BNC connector)</td>
</tr>
<tr>
<td>S8300TC/10/BNC/TL</td>
<td>Kit, S8000CD + EA899TC/P1K + FC875/T + S855/10/BNC/TL (In line pH, with ATC, 3/4” Flow cell, 10ft cable, BNC connector, PT1000 TC type)</td>
</tr>
</tbody>
</table>

## Outline and Dimensions

**S8300TC/10/BNC/TL**

![Diagram of S8300TC/10/BNC/TL](image1.png)

**S8000CD + EA899TC + S855 + FC804/FC805/FC806**

![Diagram of S8000CD + EA899TC + S855 + FC804/FC805/FC806](image2.png)

DESIGNED AND ASSEMBLED IN CALIFORNIA, USA

© Sensorex Corporation. All rights reserved. In the interest of improving and updating its equipment, Sensorex reserves the right to alter specifications to equipment at any time.