

ST-765SS-O3

Inline pH + Ozone Sensor for Disinfection Monitoring

Description

The Pyxis ST-765SS-O3 is a stainless-steel multi-parameter membrane-less sensor based on unique electrochemical principles to determine Ozone plus pH and temperature of water. This sensor incorporates Pyxis' advanced technology in the field of bare-gold electrochemical detection. The ST-765SS-O3 can simultaneously compensate for temperature and pH in the measurement of Ozone based on real-time conditions present in the application of use. This unique internal compensation results in a highly accurate oxidizer measurement consistent with DPD wet chemistry methodology as high as a pH of 9.0+ and is compliant with USEPA – 334.0 and ISO-7393 guidelines.

The ST-765SS-O3 sensor offers a replaceable, front loading reference electrode assembly that has been independently developed by Pyxis Lab eliminating the shortcomings associated with membranes and gel replacement while offering reduced polarization time on startup with an electrode life span potential of up to 2-years. The flat front-end design of the ST-765SS-O3 makes this platform less prone to contamination or fouling and is easy to clean. The ST-765SS-O3 sensor body is composed of 304 stainless steel and is well suited for aggressive environments.

The ST-765SS-O3 sensor offers 2x 4-20mA and RS-485 Modbus outputs and is Bluetooth 5.0 enabled when used in conjunction with the MA-CR Bluetooth Adapter. This four-electrode composite sensor provides three measured parameters including Ozone, pH and temperature with one sensor equipped with fully integrated 2x 4-20mA and RS-485 Modbus outputs. ST-765SS-O3 is uniquely designed for rapid and precise monitoring of disinfection process water applications utilizing Ozone.

Key Features

- Real-Time pH + Oxidizer (0-5ppm) Detection
- Dual 4-20mA Outputs (Oxidizer + pH) and RS-485
- Bluetooth Enabled when used with MA-CR Adapter Wireless uPyxis Calibration
- Integrated RTD & pH Compensation to pH 9.0+ of the Oxidizer Value
- Replaceable EH-765 Reference Electrode Assembly – Simple Maintenance



ST-765SS-O3
Ozone + pH Sensor



EH-765
Replacement Electrode
for all ST-765SS Series

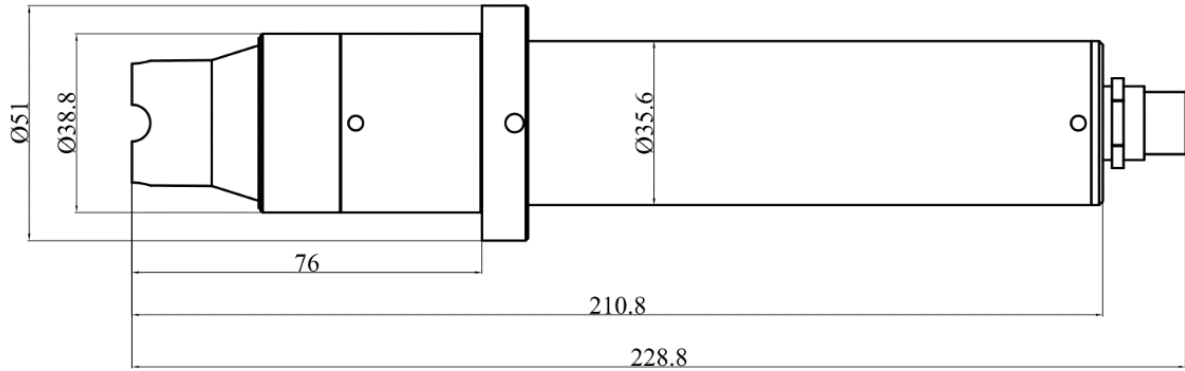
Common Applications

- Bottled Water Filler Production
- Spring Water Transport Disinfection
- Food / Beverage Processing Equipment Sanitizing
- Conveyors / Flume Water
- Irrigation & Process Water

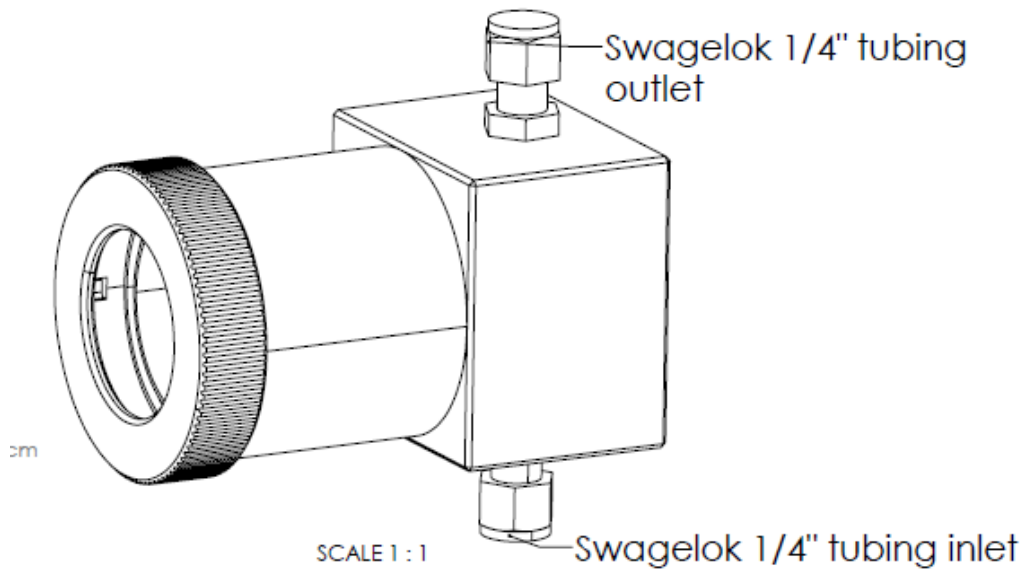
Specifications

Item	ST-765SS-O3
P/N	53614
Sensor Body Material	304SS
Oxidizer Range	0.00-2.00 ppm Ozone
Oxidizer Precision	± 0.01mg/L or 1% of the value w/pH compensation up to 9.0+
pH Range	0-14
pH Precision	±0.01 pH
Sample Inlet Pressure	7.25 – 30 psi (0.05 – 0.2MPa)
Installation	ST-007 Stainless Steel Flow Cell Assembly <i>(Sold Separately)</i>
ST-007 Minimum Flow Rate	200 mL/minute
ST-007 Maximum Flow Rate	400 mL/minute
ST-007 Sample Inlet	¼ - inch OD
ST-007 Sample Outlet	¼ - inch OD
Power Supply	22 – 26VDC, Power Consumption 2W
Storage Temperature	-7 °C – 60 °C (20 – 140 °F)
Outputs	Dual Isolated 4 – 20 mA Analog Outputs + Isolated RS-485 Digital Output
Dimension (L x D)	Length 8.3 inch (210.8 mm), body diameter 1.4 Inch (35.6 mm)
Weight	530 g (1.16lbs)
Maximum Sensor Pressure	100 psi (6.9 Bar) – Sensor Only
Operating Temperature	4 °C – 49 °C (40 – 120 °F)
Wet Material	UPVC
Rating	IP67, Fully Dustproof & Waterproof
Selectivity	Non-Selective / Cross Sensitive to other Oxidizing Species
Compliance	EPA 334.0 / ISO 7393
Regulation	CE Marked / RoHS
Cables Included	MA-4.9CR Cable (8Pin Adapters – 4.9ft) MA-1.5CR Cable (8 Pin Adapter / Flying Leads – 1.5ft)
Typical Electrode Service Life	2 Years
Electrode Warranty	6 Months
Sensor Body Warranty	13 Months

Dimensions of ST-765SS-O3 (mm)



Dimensions of ST-007 Stainless Steel Flow Cell Assembly for ST-765SS-O3 (mm)



OxiPanel IK-765SS-O3 Ozone + pH + Temperature Online Monitoring Panel

The IK-765SS-O3 is a dual-parameter inline water analyzer specifically designed as a 'Turn-Key' monitoring solution for clean water applications including bottled water production, drinking water networks, secondary water supply and alternative clean-water ozone treatment applications. The IK-765SS-O3 offers highly accurate, real-time measurement, display and data-logging of Ozone (O3), pH and Temperature utilizing proprietary Pyxis Lab smart sensor technology, coupled with a Pyxis UC-80 touch screen display and data logging terminal. The IK-765 series is offered in a convenient and easy to integrate panel mounted format for rapid installation and simple maintenance.

The premounted UC-80 is a microprocessor display/data-logging terminal that has been preconfigured to connect Pyxis inline sensors with fully integrated calibration, scaling and measurement protocol. When any Pyxis Lab sensor is connected to the UC-80 in RS-485 Modbus, the UC-80 interface recognizes the sensor and configuration for immediate data display, data logging and communication with zero configuration necessary.

Item	P/N	Description
IK-765SS-O3	42091	ST-765SS-O3 Sensor + ST-007 Flow Assembly + UC-80 Display/Data Logger

Image of OxiPanel IK-765SS-O3

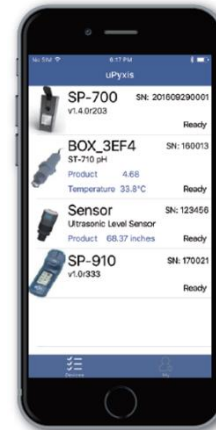


uPyxis Mobile & Desktop APPS for Wireless Setup, Diagnostics & Calibration

The uPyxis APP manages all Pyxis portable meter and inline sensors on mobile and desktop devices, including Apple iPhones and Samsung Android smartphones. When connected to the Pyxis ST-765SS Series inline sensors, the uPyxis APP enables users to conduct a wireless probe calibration of pH and oxidizer from the touch of their smart device. The uPyxis direct calibration of the sensor eliminates unnecessary time wasted with calibrating the probe through the receiving controller and ensures the highest degree of accuracy and minimizes time spent in the field.

Note The uPyxis Mobile APP is evolving rapidly and users can find the latest version at no cost on Apple iStore or Google Play. The uPyxis Desktop APP may be downloaded at <https://pyxis-lab.com/support-2/>

For wireless access to all Pyxis devices via uPyxis, users will require the inline Bluetooth Adapter (P/N: MA-CR). Details can be found in the Order Information section of this Data Sheet.



Order Information

ST-765SS-O3 (304SS Inline Ozone 0 -2.0ppm)

P/N

53614

Optional-Replacement Accessories

EH-765 (ST-765SS Replacement Reference Electrode Assembly)

53061

ST-007 (Optional Stainless Steel Flow Cell for ST-765SS Series)

50700-A51

FR-300-PLUS (Optional Auto-Brushing Flow Assembly For Dirty Water Applications)

50700-A44

MA-CR Bluetooth Adapter (Optional 8-Pin Bluetooth Adapter for use with uPyxis APP)

MA-CR

UC-80 Display + Data Logging Terminal

14003

OxiPanel IK-765SS-O3 (Ozone + pH + Temperature Analyzer)

42091

SP-200 OxiPocket™ (Pocket All-Oxidizing Disinfectants Colorimeter & Fluorometer)

50802