



IOTRON™ SENSORS

INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part number:</u>	6120A
<u>Configuration:</u>	3/4" – 3/4" MNPT Integrated Sulfide Ion Selective Sensor
<u>General Specifications:</u>	
<u>Concentration Range:</u>	1 to 10^{-7} Molar, 32,000 to 0.003 ppm
<u>Lowest Limit of Detection</u>	10^{-17} Molar, 3.2×10^{-13} ppm
<u>pH Range:</u>	11 to 13
<u>Temperature Range:</u>	5 to 50 °C
<u>Pressure Range:</u>	1 to 20 psig (6.9 to 138 kPag)
<u>Body Material:</u>	CPVC (Chlorinated-Polyvinyl-Chloride)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <6-5>
<u>Cable:</u>	RG 174/U Coaxial (without preamplifier)
<u>Connector:</u>	BNC (unless otherwise specified)
<u>Ion Sensor Specifications:</u>	
<u>Measuring Membrane:</u>	Selective Sulfide Sensitive Membrane (solid state)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 1 M Ohms @ 25 °C
<u>Interfering Ions:</u>	
<u>Given in Ratios of Permissible Excess:</u>	Hg ²⁺ (Trace)
<u>Interfering Ion / Measured Ion (in Molarity)</u>	
<u>Reference System Specifications:</u>	
<u>Type:</u>	Double Junction
<u>Reference Half Cell:</u>	Ag/AgCl, Saturated KCl
<u>Primary Junction:</u>	Porous Ceramic, Saturated KCl in crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Saturated with KCl in crosslinked polymer
<u>Surface Area:</u>	366,000 mil ² , (236 mm ²)
<u>Special Features:</u>	<p>Crosslinked polymer in the reference system is resistant to heat, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending the life of the sensor.</p> <p>The ion sensitive part of the sensor is designed to resist the attack of sulfides, alkali and solvents used in chemical processes.</p> <p>The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.</p>
<u>Recommended Applications:</u>	Sulfide ion concentration in aqueous solution from wastewater industrial process solutions
<u>Storage and Shelf Life:</u>	At room temperature with closed protector cap, 1 year from date of manufacture.
<u>Standard Hook-Up Options:</u>	No Preamp - BNC Connector + TC lead wires With Preamp – Multiconductor Lead Wires – See Hook Up Schematics

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



ASTI		Advanced Sensor Technologies, Inc.	
INTEGRATED pH SENSOR			
REF. DRAWING <6-5>			
SIZE	WEB NO.	DWG NO.	REV
2	#<6-5>	AST16-5.DWG	1
DRAWN BY: PETE CSISZAR		SCALE: NONE	SHEET 1 OF 1

1 2 3 4