



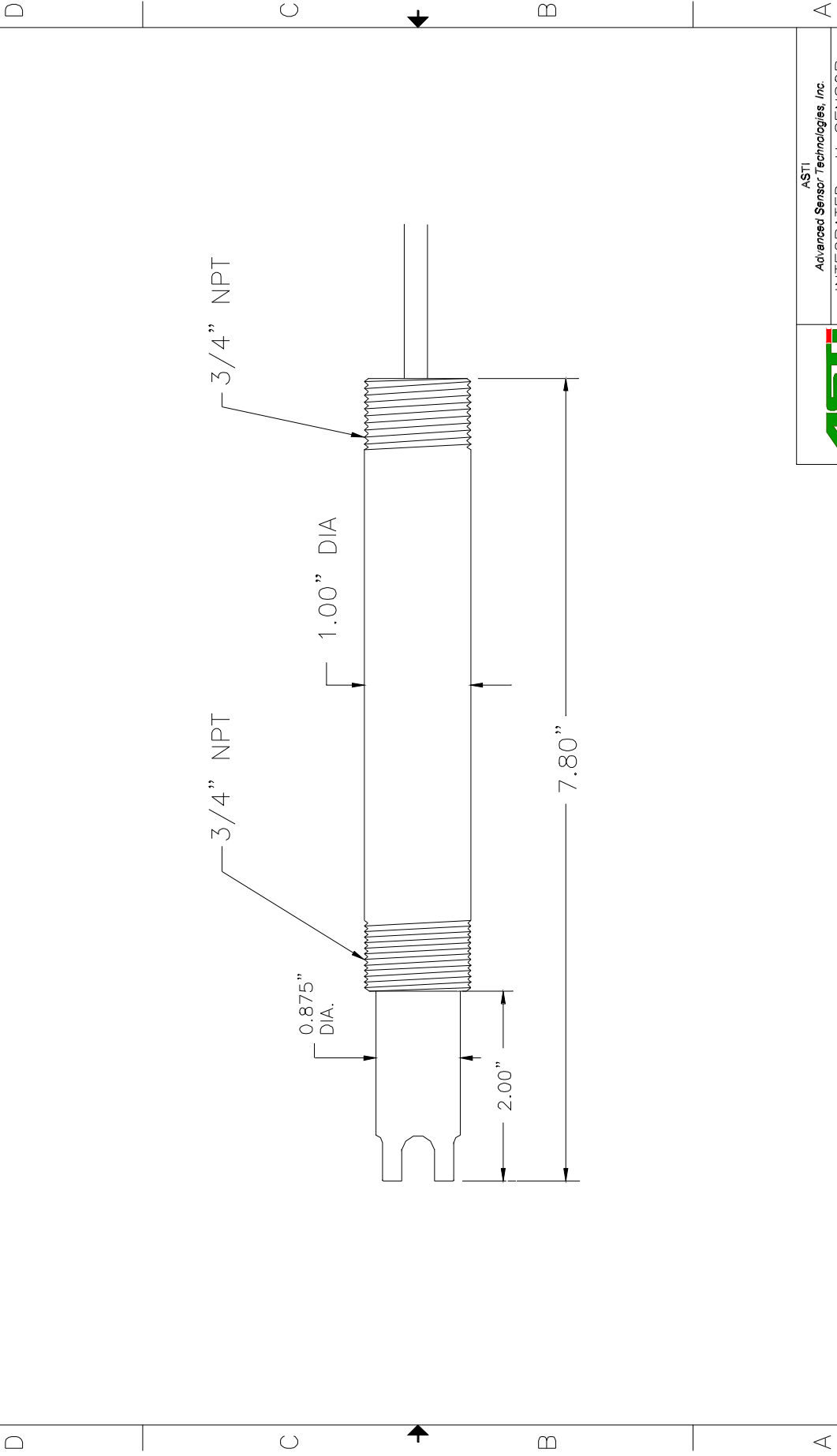
# IOTRON™ SENSORS

## INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part number:</u>	6430A
<u>Configuration:</u>	3/4" – 3/4" MNPT Integrated Sodium Ion Selective Sensor
<u>General Specifications:</u>	
<u>Concentration Range:</u>	23,000 - 0.230 ppm
<u>Lowest Limit of Detection</u>	0 .023 ppm
<u>pH Range:</u>	2.5 - 11
<u>Temperature Range:</u>	5 to 40 °C
<u>Pressure Range:</u>	1 to 10 psig (6.9 to 69 kPag)
<u>Body Material:</u>	CPVC (Chlorinated-Polyvinyl-Chloride)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <6-6>
<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 Sodium Sensitive Membrane (organic)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 100 M Ohms @ 25 °C
<u>Interfering Ions: (given in permissible ratios of excess)</u>	Li <sup>+</sup> (16), K <sup>+</sup> (32),Mg <sup>+2</sup> (2500),Ca <sup>+2</sup> (800)
<u>Reference System Specifications:</u>	
<u>Type:</u>	Double Junction
<u>Reference Half Cell:</u>	Ag/AgCl, Saturated MgCl <sub>2</sub>
<u>Primary Junction:</u>	Porous Ceramic, Saturated MgCl <sub>2</sub> in high temperature crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Saturated with MgCl <sub>2</sub> in high temperature crosslinked polymer
<u>Surface Area:</u>	366,000 mil <sup>2</sup> , (236 mm <sup>2</sup> )
<u>Special Features:</u>	<p>Crosslinked polymer in the reference system is resistant to high heat, solvents and to most chemicals. Sensor holds an excess of MgCl<sub>2</sub> assuring saturation at all temperatures and extending the life of the sensor.</p> <p>The sensor is designed to resist the interactions of various ions and many solvent in chemical and biochemical 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>	Sodium ion concentration in aqueous solution from ultrapure water through waste water to industrial, organic or biomedical 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 <6-6>

DIMENSION	SIZE	WEB NO.	DWG NO.	ASTIG-6.DWG	REV
	2	<6-6>			1
DRAWN BY: PETE CSISZAR		SCALE: NONE		DATE: MARCH, 2003	SHEET 1 OF 1

1 2 3 4