IOTRON™ SENSORS
ION SELECTIVE SENSOR SPECIFICATIONS

Part number:	AB 6140
Configuration:	3/4" – 1" MNPT Integrated Iodide Ion Selective Sensor
General Specifications:	
Concentration Range:	1 to 10^{-8} Molar, 127,000 to 0.006 ppm
Lowest Limit of Detection	10^{-8} Molar, .001 ppm
pH Range:	1 to 13
Temperature Range:	5 to 50 °C
Pressure Range:	1 to 20 psig (6.9 to 138 kPag)
Body Material:	Ultem (Poly-Ether-Imide)
Junction Material:	Kynar (Poly-Vinylidene-Fluoride)
Dimensions:	Drawing <6-2>
Cable:	RG 174/U Coaxial (without preamplifier)
Connector:	BNC (unless otherwise specified)
Ion Sensor Specifications:	
Measuring Membrane:	Selective Iodide Sensitive Membrane (solid state)
Dimensions:	0.310, (7.8 mm) DIA
Initial Impedance:	Less than 20 M Ohms @ 25 °C
Interferring Ions: Given in Ratios of Permissible Excess: Interferring Ion / Measured Ion (in Molarity)	OH^- (10^8), Cl^- (10^6), Br^- ($5X10^3$), S^{2-} (Trace)
Reference System Specifications:	
Type:	Double Junction
Reference Half Cell:	Ag/AgCl, Saturated KCl
Primary Junction:	Porous Ceramic, Saturated KCl in crosslinked polymer
Secondary Junction:	Porous Kynar, Saturated with KNO_3 in crosslinked polymer
Surface Area:	366,000 mil^2, (236 mm^2)
Special Features:	Crosslinked polymer in the reference system is resistant to heat, solvents and to most chemicals. Sensor holds an excess of KNO_3, assuring saturation at all temperatures and extending the life of the sensor. The ion sensitive part of the sensor is designed to most acids, alkali and organic solvents used in checmical processes. The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.
Recommended Applications:	Iodide ion concentration in aqueous solution from wastewater industrial process solutions
Storage and Shelf Life:	At room temperature with closed protector cap, 1 year from date of manufacture.
Standard Hook-Up Options:	No Preamp - BNC Connector + TC lead wires With Preamp – Multiconductor Lead Wires – See Hook Up Schematics

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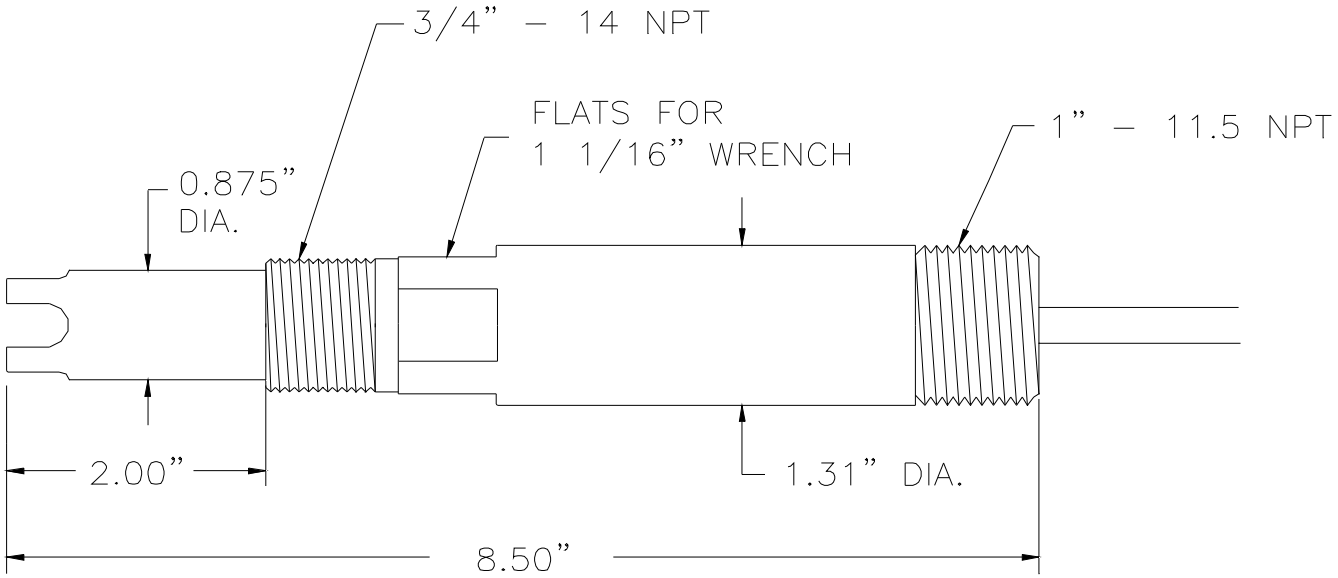
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



	ASTI *Advanced Sensor Technologies, Inc.*	
DIMENSION	ION SELECTIVE SENSOR REF. DRAWING <6–2>	
DRAWN BY: PETE CSISZAR	SIZE 2 / WEB NO. #<6–2> / DWG NO. ASTIAB6–2.DWG / REV 1	
	SCALE NONE / DATE: MARCH, 2003 / SHEET 1 OF 1	