Connection Diagram of Iotron™ Sensors **without** Preamplifiers to Most Endress & Hauser and Wedgewood Transmitters (E+H Liquisys M CPM153 & CPM223/253 and Wedgewood 800/802 pH/ORP Analyzers)

Cable Color Coding	Instrument Terminal Name / Value	E+H CPM223/253 & Wedgewood 800/802 Terminal Numbers
Clear	Measuring pH / ORP Electrode	A – pH
Black	Reference Electrode	A – Ref.
Blue	Outer Shield / Screen	C – Shield (S)
White	TC Input	E - 13
Green	TC Input	E - 11
(Yellow)	(TC Comp) - Input for Cable Length Compensation	E - 12

Note 1:
The optional three-wire TC style employs a TC cable length compensation signal and is only recommended whenever a cable length of over 15 feet is required (5 meters). If no yellow TC Comp lead is available then use a jumper between terminal E-13 (White TC input) and terminal E-12 (TC Comp).

Note 2:
Most E+H Transmitters support 100 and 1000 Ohm Platinum Temperature Compensation (TC) elements (please check you manual prior to ordering). If you are not sure of the value of the TC element for your ASTI sensor, simply use a multi-meter set to measure Ohms and determine the resistance between the White and Green TC input wires. If the value is about 110 Ohms at 25 degrees Celsius the element is defined "100 Ohm PT" and if the value is about 1073 Ohms at 25 degrees Celsius the element is defined as "1000 Ohm PT a.k.a. 1K PT".

Note 3:
For cable lengths over 15 feet (5 meters), a 1000 (1K) Ohm Platinum TC element is recommended to minimize the effects of cable length on the TC element (temperature) reading. Please be sure to request a 1000 Ohm TC element only if this option is supported by your particular model of E+H/Wedgewood transmitter (please check you manual prior to ordering). Additionally, a three-wire TC element is also recommended for cable lengths greater than 15 feet.

Note 4:
If a cable length greater than 15 feet, it is recommended that the cable be run in conduit to minimize potential noise from RF interference and other electrical equipment and signals.

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