

# PT Interface Board



## Overview

The PT Interface board is a low pass filter signal conditioner that converts the input voltage from the Potential Transformers (PT) to a 24-volt pulse that can be routed to Woodward digital speed sensor equipment or PLC-based frequency counting equipment. The interface provides 3500 Volt isolation between the PT input and pulsed output. A built in 3-pole Butterworth filter blocks high frequency noise preventing erroneous readings from reaching the frequency counting equipment.

The device is very sensitive and can detect AC voltages as low as 0.2 VAC. The amplitude of the output pulse is independent of the input voltage. The nominal frequency range is 6 HZ to 120 HZ. The ability to sense low AC voltage coupled with a broad frequency range allows governors to use the PT signal as a reliable primary speed signal. Due to residual magnetism, the generator excitation does not have to be active to gain a valid speed signal.



*Box assembly*

**Part Numbers:**

<b>Woodward</b>	
<b>Description</b>	<b>Part Number</b>
Board Only	5421-213
Entire Box Assembly	5439-210
<b>GE / Alstom</b>	
<b>Description</b>	<b>Part Number</b>
VT Interface	100248
VT Interface	100470
<b>Actuation Test Equipment</b>	
<b>Description</b>	<b>Part Number</b>
VT/PT Interface Module	ATE-30 (Weidmuller enclosure)
VT/PT Interface Module	ATE-31 (Phoenix Contact enclosure)
<b>ATE-30/ ATE-31 Hydroelectric Turbine Speed Signal Conditioner Replacement</b>	
<b>Description</b>	<b>Part Number</b>
AGC-E190315	VT/PT Interface Module – Din Rail Mount

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