GE
Measurement & Control Solutions

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Greetings:

The Essential Insight.mesh product family includes two types of wireless modules that relay the transducer signals from the monitoring point back to the Manager Gateway module. The wSIM (wireless sensor input module) connects to the transducers, process the signal and sends the data over to a Nivis radio, VN310G, to get relayed over the ISA100 wireless mesh network. Sometimes the distance is too great or the signal strength between wSIMs is poor. To improve the mesh's signal quality a Repeater can be placed into the mesh matrix. The Repeater uses the same type of Nivis radio as that in the wSIM. Both units fit into the same basic form-factor, except that the wSIM has transducer ports to which four sensors can connect.

The ISA wSIM: 185410-01, 185410-02 and ISA Repeater: 185450-01, 185450-02 use the same main board that includes the radio with a fixed antenna, microprocessor, power management network and also includes all of the same components on the board (even the same universal firmware code). The only difference is that the wSIM has some additional circuitry on separate boards that interface to the transducer signals and then sends the data over to the main board. All of the hardware and firmware used in the Repeater is in the wSIM. The two different modules operate in the same manner; use the same hardware, same firmware code and radio with fixed antenna. Additionally, the -02 version of each device has been created for our internal sales people for use as demonstration units. These device are different from the -01 counterparts only in the label. In all other ways the -01 and -02 are equivalent. For these reasons, we wish to use the same FCC ID number for the wSIM and Repeater respectively: 8394A-18541001.

Signed: Tonya Woods
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