

Unleash the full benefits and features of your process level devices

Legacy host systems unable to read HART data from wired process level transmitters have historically been limited to communicating only one variable – level – even if the device itself is multivariable.

With the Smart Wireless THUM Adapter, you get full access to otherwise stranded information. This means you can utilize your level device to its full potential by gathering multivariable data, as well as take full advantage of their diagnostic capabilities. The THUM adapter also allows you to install level devices in locations where power is available but with no signal wiring.

Even commissioning is made easier with the THUM adapter. When the installation is done, all the configuration and commissioning can be executed remotely from the control room.



Rosemount process level devices with the Smart Wireless THUM Adapter power the PlantWeb digital plant architecture by delivering more advanced field intelligence for better decision-making to help you achieve unparalleled efficiency and productivity.

Key benefits

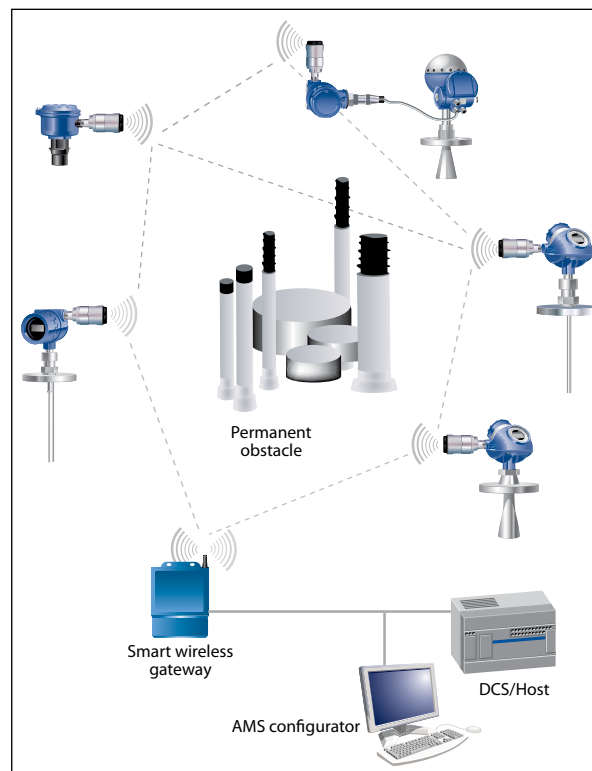
- Make any HART® device wireless to enable new measurement points
- Efficiently gather data from multivariable devices
- Remotely manage devices and monitor health
- Gain access to advanced instrument diagnostics

EASY TO USE. EASY TO INTEGRATE

The THUM adapter allows you to wirelessly gain the full benefits of process level advanced diagnostics without the need for any additional software. All you need in addition to the THUM is a Smart Wireless Gateway and a process level transmitter.

All of Emerson's Smart Wireless field network devices can be integrated directly into your existing automation architecture without the need for upfront engineering, site surveys or additional software. Wired or wireless, the network looks the same to your operators.

For additional ease of use, the AMS Suite provides more convenient access to information that you don't have today. Emerson's Smart Wireless technologies put valuable information within reach – easily and cost effectively – to give you better insights into what's happening in your operation.



What type of process data can the THUM adapter provide?

The wireless transmission supports multivariable data handled by the transmitter, such as level, interface, distance, volume and temperature, as well as alerts and device warnings

How do I handle configuration of process level transmitters in a wireless system?

The THUM adapter can route any HART command to the transmitter which allows full configuration wirelessly when using AMS

Can advanced diagnostics and the THUM adapter tell me when the signal strength drops (e.g. sensor is coated)?

Yes, the THUM adapter can provide annunciation of signal strength and other diagnostics applications configured by the user

MAKE ANY HART DEVICE WIRELESS TO ENABLE NEW MEASUREMENT POINTS

Costs associated with communication wiring can easily drive up the cost for, or even prohibit, the installation of level devices on previously inaccessible remote process tanks. However, Emerson's THUM adapter enables effective implementation of new measurement points. All you need is power! The THUM adapter connects remote level devices to your DeltaV or host system through the Smart Wireless Gateway.

EFFICIENTLY GATHER DATA FROM MULTIVARIABLE DEVICES

The THUM adapter can transmit up to four variables and additional HART status information at the user configurable update rate. Access to this new information enables you to more fully optimize your operations for improved performance.

This means that for an interface application you gain access to the level and interface level in your analog system, when connecting the THUM adapter to a Guided Wave Radar transmitter.

REMOTELY MANAGE DEVICES AND MONITOR HEALTH

The THUM adapter can route data to the level transmitter allowing full configuration and diagnostics using AMS. When the installation is done, all the configuration and commissioning can be executed remotely from the control room, meaning less trips to the field.

GAIN ACCESS TO ADVANCED INSTRUMENT DIAGNOSTICS

If your level device has diagnostics capabilities, the THUM adapter can utilize them. The Rosemount 5300 GWR, for example, has Signal Quality Metrics diagnostics that can help you schedule maintenance and increase your plant's efficiency.

In addition to diagnostic alerts, the radar echo curves can also be used to gain insight to your process. By studying the curves, it is possible to identify characteristics of your process such as: foam, turbulence or emulsions, which can help you reduce unnecessary trips to the field.

TECHNICAL REQUIREMENTS

Voltage drop across THUM adapter: 2.25 Volts at 3.5 mA; 1.2 Volts at 25 mA
 Loop resistance required: 250 Ohms
 Power requirements: 18.5 Volts (for 5300/5400), 13.5 Volts (for 3300),
 14.5 Volts (for 3100), 22.5 Volts (for 5600)
 THUM adapter update rate: User selectable, 8 sec. to 60 min
 For further information, please see technical note reference number 00840-0100-4026

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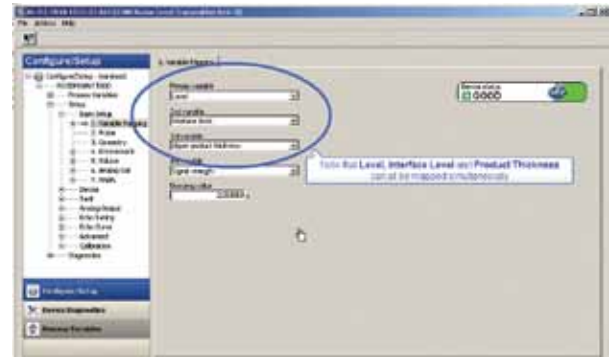
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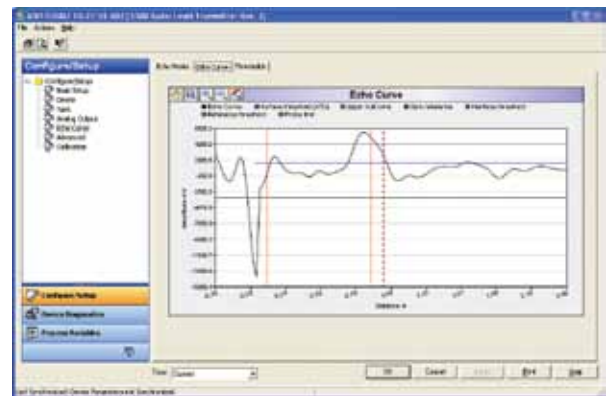
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Easy configuration and diagnostics through a user-friendly interface



With enhanced EDDLs, it is possible to view echo curves from the 5300 and 5400 radar transmitters.