Get more from your Rosemount MultiVariable™ Vortex Flowmeter

The Rosemount MultiVariable™ Vortex Flowmeter is specifically designed to deliver more process information than previously available in vortex flowmeters. The Smart Wireless THUM adapter makes it easy to access all of the additional process information available in the Rosemount Vortex Flowmeter:

- MultiVariable capability delivers compensated mass flow, volumetric flow, and a temperature measurement.
- Remote flow simulation without any additional hardware verifies electronics performance over time which simplifies troubleshooting and flowmeter auditing.
- Flowmeter diagnostics including indication of the temperature sensor health can easily be accessed using the Smart Wireless THUM adapter.
- Totalized flow values from the Rosemount vortex flowmeter can be communicated via the Smart Wireless THUM without the need for any additional wiring or flow computer.

POWERS PlantWeb The Rosemount MultiVariable Vortex Flowmeter with the Smart Wireless THUM adapter powers the PlantWeb® digital plant architecture by delivering more advanced field intelligence for better decision-making to help you achieve unparalleled efficiency and productivity.
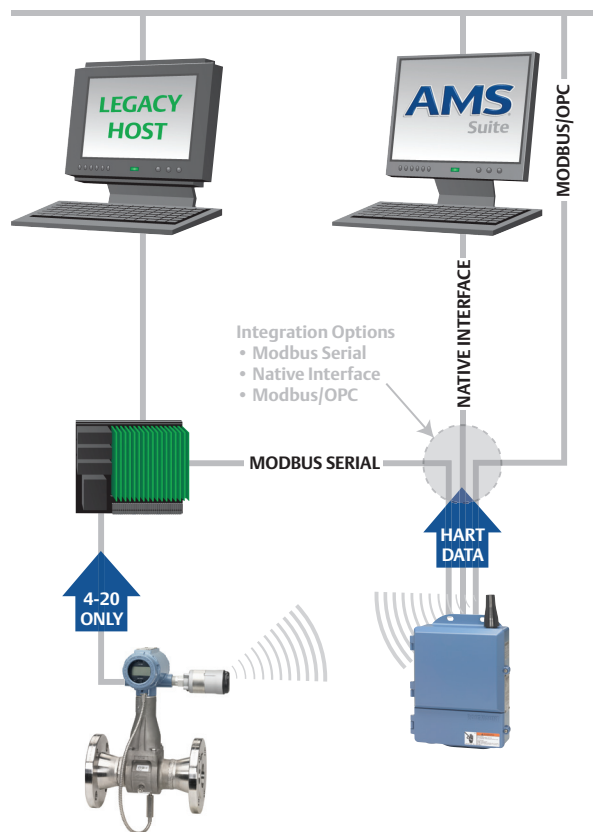
EASY TO USE. EASY TO INTEGRATE.

The Smart Wireless THUM adapter allows you to wirelessly access the full range of information available in the Rosemount MultiVariable vortex flowmeter. All you need in addition to the THUM is a Smart Wireless Gateway and a new or existing Rosemount Vortex Flowmeter.

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: Intelligent Device Manager 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.

LEGACY HOST

AMS Suite

MODBUS/OPC

NATIVE INTERFACE

Integration Options
- Modbus Serial
- Native Interface
- Modbus/OPC

MODBUS SERIAL

HART DATA

4-20 ONLY

Can I use the 4-20mA to transmit the mass flow information and use the THUM to communicate the process temperature?

Yes, the THUM can provide the temperature measurement from the temperature sensor in the flowmeter.

Can I locally power my vortex meter that is used for totalization to save wiring costs and wirelessly communicate the totalized value?

Yes, instantaneously totalized values can be communicated via the THUM.

Can I use the THUM to access the flow simulation feature for meter verification without having to make a trip to the meter?

Electronics verification can be fully completed remotely by using the THUM.

ROSEMOUNT®

EMERSON™
Process Management

BETTER INFORMATION FOR IMPROVED PERFORMANCE

The Smart Wireless 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.
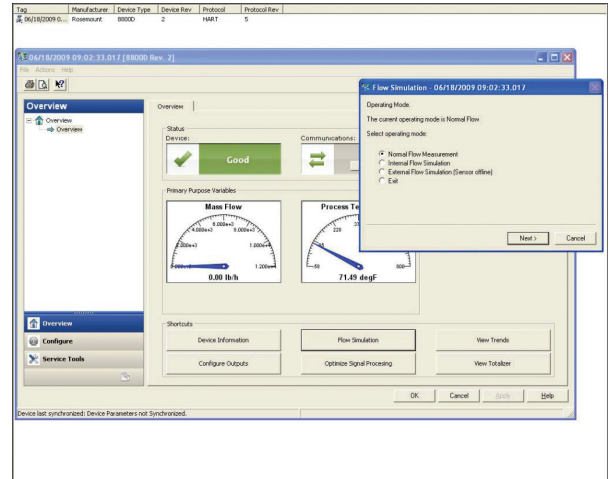
Selectable Variables

Mass Flow
Volumetric Flow
Temperature Measurement
Totalized Flow
Density

Important Status Information

Electronics Temperature
Electronics Verification
Signal to Trigger Diagnostic (Signal Strength)
Device Alerts
Process Alerts

TECHNICAL REQUIREMENTS

Voltage drop across THUM:	2.25 Volts at 3.5 mA; 1 Volt at 25 mA
Loop resistance required:	250 Ohms
Power requirements:	14.5 Volts
THUM update rate:	16 seconds to 60 minutes

Easy Verification Reduces Maintenance Costs
With Rosemount vortex flowmeters users can internally verify the meter calibration by utilizing PlantWeb® diagnostics. An internal signal generator can be accessed with a 375 Field Communicator or AMS® Suite: Device Manager, so no separate equipment is needed.

ROSEMOUNT®

EMERSON™
Process Management