

# SMART WIRELESS THUM™ ADAPTER

ROSEMOUNT ANALYTICAL 5081 TRANSMITTER ADVANCED DIAGNOSTICS

WirelessHART

## Unleash the full benefits and features of the Model 5081 Advanced Diagnostics

Historically analyzer diagnostics have focused on detecting internal device problems such as open wiring, faulty temperature element or analyzer electronics failure.

The Smart Wireless THUM adapter is an easy way to unleash otherwise “stranded” advanced diagnostics, such as pH slope, reference offset, glass impedance, and reference impedance to enable you to diagnose probe condition.



The Rosemount Analytical 5081 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.

Action to more comprehensive data enables you to:

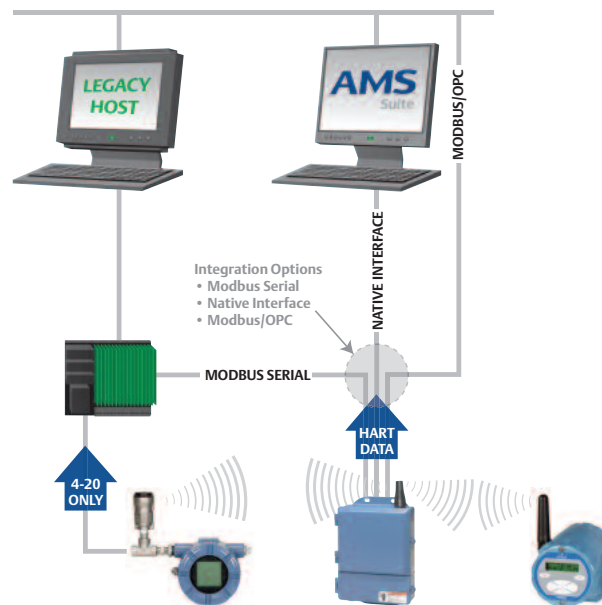
- Enhance quality and improve productivity
- Enhance availability with proactive monitoring
- Detect abnormal conditions before they cause a major problem

### EASY TO USE. EASY TO INTEGRATE.

The Smart Wireless THUM adapter allows you to wirelessly gain the full benefits the Model 5081 has to offer without the need for any additional software. All you need in addition to the THUM is a Smart Wireless Gateway and a new or existing Model 5081 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 your operation.



**For existing Model 5081 transmitters that are installed at a remote site and not connected to the monitoring host, what HART features can be enabled with the THUM?**

*All HART reporting and diagnostic features are available.*

**Can I remotely calibrate the measurement loop using the THUM attached to a Model 5081 HART conductivity transmitter?**

*Yes. From the host asset management system, a cell constant can be transmitted wirelessly to remotely calibrate the Model 5081-C measurement loop to ensure accuracy of process readings.*

**From AMS, can I reset the transmitter remotely?**

*Yes. A HART command can be downloaded via WirelessHART to reset the device to factory default condition to assist in device troubleshooting.*

## BETTER INFORMATION FOR IMPROVED PERFORMANCE

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

## THUM TECHNICAL REQUIREMENTS

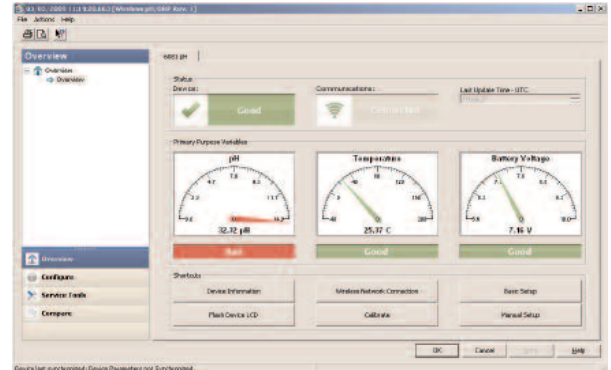
Voltage drop across THUM: 2.25 Volts at 3.5 mA; 1 volt at 25 mA  
 Loop resistance required: 250 Ohms  
 Power requirements: 14.5 Volts  
 THUM update rate: 16 seconds to 60 minutes

## MODEL 5081 TWO-WIRE ANALYTICAL TRANSMITTERS

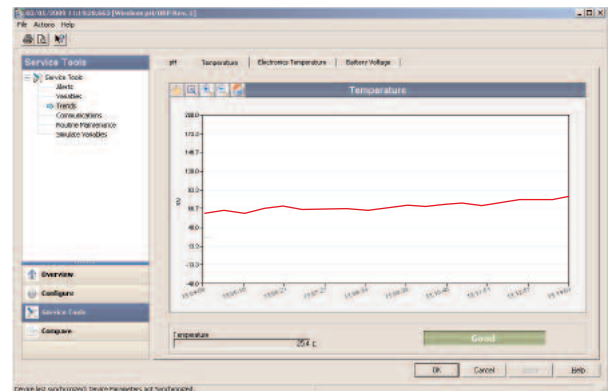
- 5081-P pH / ORP
- 5081-C Contacting Conductivity
- 5081-T Toroidal Conductivity
- 5081-A Amperometric: Dissolved Oxygen, Chlorine and Ozone

## KEY FEATURES OF THE MODEL 5081 TRANSMITTER

- Local access to user menus and diagnostics
- Simple menu structure
- Intrinsically safe and explosion-proof enclosure
- Large easy-to-read process variables
- Advanced diagnostics



*Process diagnostics and warnings are visible at a glance*



*Visibly monitor temperature range with trended process variable data*

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