

WIRELESS TRANSMITTER for pH and ORP

- HIGH ACCURACY AND RELIABILITY for monitoring applications
- SELF-ORGANIZING NETWORK for high data reliability and network stability
- INDUSTRY LEADING WIRELESS SECURITY
- COMPATIBLE WITH 1420 WIRELESS GATEWAY and Emerson Process Management wireless networks
- EASY TO READ two-line display with easy to use menus
- HART 7.0 Digital Communications
- 2.4 GHz DSSS Radio Frequency
- CONTINUOUS DIAGNOSTICS monitor sensor performance and health



FEATURES AND APPLICATIONS

The Model 6081-P transmitter is ideal for monitoring applications, especially in hard-to-reach or cost-prohibitive locations. Model 6081-P measures pH and ORP and is compatible with most Rosemount Analytical pH and ORP sensors. The transmitter has a rugged, cast aluminum weatherproof and corrosion-resistant enclosure (NEMA 4X and IP65). The transmitter includes a two-line 16-character display with simple and intuitive menu screens. Plain language prompts in 6 local languages guide the user through the programming and calibration procedures. HART digital communications allows access to AMS (Asset Management Solutions) for live process variables and useful diagnostics and troubleshooting information.

Installation and start-up of the Model 6081-P wireless transmitter is simple. Just power the Model 6081-P and assign it to a wireless network with a Model 1420 Gateway. The unit will auto-locate the most efficient path to the host and will begin transmitting measurement data immediately via 2.4 GHz wireless communications. The Self-Organizing Network ensures exceptional data reliability and network stability. All of Emerson Process Management's wireless devices employ Encryption,

Authentication, Verification, Anti-Jamming and Key Management to ensure data transmission and security. Rosemount Analytical devices include SmartPower™ technology to reduce power consumption and extend power module life while delivering highly reliable measurements with rich HART data and diagnostic information.

SPECIFICATIONS - GENERAL

Enclosure: Cast aluminum. NEMA 4X (IP65).

Dimensions: 6.55" x 5.40" x 5.15" (166mm x 137mm x 131mm).

Conduit Openings: 3/4" FNPT

Ambient Temperature: 32 to 122°F (0 to 50°C)

Storage Temperature: -4 to 158°F (-20 to 70°C)

Relative Humidity: 0 to 95% (non-condensing)

Weight/Shipping Weight: 7 lbs/8 lbs (3.2/3.6 kg)

RFI/EMI: EN-61326

Digital Communications: HART 7.0

SPECIFICATIONS - WIRELESS

Output: Wireless enabled HART 7.0

Transmit Rate: User selectable

Antenna: PBT/PC integrated omni-directional antenna

Radio Frequency: 2.4 GHz DSSS

FUNCTIONAL SPECIFICATIONS

pH Range: 0 to 14

ORP Range: -1400 to +1400mV

Calibrations/standardization: The automatic buffer recognition uses stored buffer values and their temperature curves for the most common buffer standards available worldwide. The transmitter also performs a stabilization check on the sensor in each buffer.

A manual two-point calibration is made by immersing the sensor in two different buffer solutions and entering the pH values. The microprocessor automatically calculates the slope which is used for self-diagnostics. An error message will be displayed if the pH sensor is faulty. This slope can be read on the display and/or manually adjusted if desired.

An on-line one-point process standardization is accomplished by entering the pH or ORP value of a grab sample.

Automatic Temperature Compensation: External 3-wire Pt100 RTD or Pt1000 RTD located in the sensor, compensates the pH reading for temperature fluctuations. Compensation covers the range -15 to 130°C (5 to 270°F). Manual temperature compensation is also selectable.

Accuracy: ± 1 mV @ 25°C ± 0.01 pH

Repeatability: ± 1 mV @ 25°C ± 0.01 pH

Diagnostics: The internal diagnostics can detect:

- Calibration Error
- High Temperature Warning
- Low Temperature Warning
- ROM Failure
- Glass Failure
- Reference Failure
- Sensor Failure
- CPU Failure
- Input Warning
- Glass Warning
- Reference Warning

Once one of the above is diagnosed, the display will show a message describing the problem.

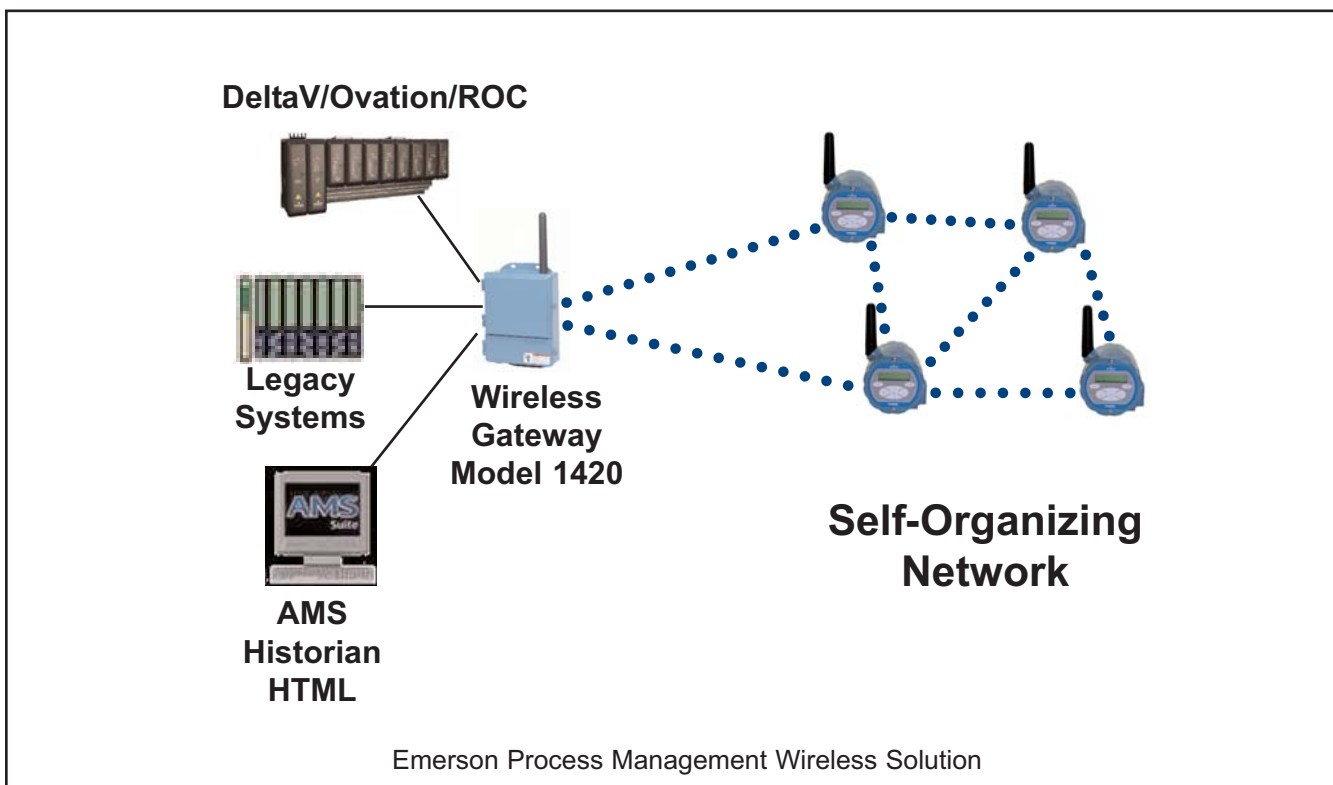
ORDERING INFORMATION

Model 6081-P measures pH and ORP and is compatible most Rosemount Analytical pH and ORP sensors. The transmitter has a rugged, cast aluminum enclosure (NEMA 4X and IP65). The device transmits live process variables and useful diagnostics via HART 7.0 digital communications to a Model 1420 Wireless Gateway. The Emerson Process Management complete wireless solution implements a Self-Organizing Network for high data transmission reliability and state-of-the-industry wireless security using robust 2.4 GHz DSSS radio transmissions.

Model	Description
6081	pH/ORP Wireless Transmitter (6081-P)
Measurement	Required Option
P	pH/ORP
Agency Approval	Required Option
60	None Required
67	FM Approved, Intrinsically Safe
69	CSA Approved , Intrinsically Safe
73	ATEX Approved, Intrinsically Safe
Spectrum Approval	Required Option
101	United States and Canada
102	EU
103	Mexico
104	Singapore
105	China
106	Australia
107	India
108	Brazil

ACCESSORIES

2002577	Pipe/Wall Mounting Bracket for the Model 6081
00753-9220-0001	Power Module



Emerson Process Management Wireless Solution



*The right people,
the right answers,
right now.*

**ROSEMOUNT ANALYTICAL
CUSTOMER SUPPORT CENTER
1-800-854-8257**



Emerson Process Management

Liquid Division

2400 Barranca Parkway
Irvine, CA 92606 USA
Tel: (949) 757-8500
Fax: (949) 474-7250

<http://www.raihome.com>



ON-LINE ORDERING NOW AVAILABLE ON OUR WEB SITE
<http://www.raihome.com>

Specifications subject to change without notice.

Credit Cards for U.S. Purchases Only.

