

## **PATRIOT™ TEST STATION MONITOR**

The Patriot™ Test Station Monitor is designed as a self-contained wireless remote monitoring unit for test stations. To ensure compliance with the Code of Federal Regulations (CFR) 49, Parts 192 and 195, which requires regular measurements of the corrosion protection (CP) system, the Patriot employs a two-coupon system in conjunction with a permanent reference electrode (Copper-Copper Sulfate) to take these measurements and transmits them wirelessly to OmniView®, our secure, web-based data management center.

### **BENEFITS:**

- CP system extends pipeline lifetime
- Reduces inspection costs
- Leverages extensive cellular or satellite coverage
- Durable polycarbonate enclosure
- Internet delivered alarms and data
- Indefinite data retention



### **OmniUpdate™**

OmniUpdate is OmniMetrix patented technology that performs remote software updates. There is no need to purchase multiple versions of firmware or make periodic field visits to the monitor with a laptop. The Patriot's firmware is automatically updated with our patented over-the-air technology so that all units are always running the latest version.

### **WHY USE A COUPON SYSTEM?**

Coupons may be used in a wide variety of applications. The most common is for buried or submerged pipelines. They are also used for USTs, on-grade storage tank bottoms, reinforcing steel in concrete, internal surfaces of elevated or on-grade water storage tanks and various other structures in aqueous environments. Coupons may be used when any of the following conditions occur:

- Current from multiple rectifiers must be interrupted synchronously or non-synchronously
- Foreign CP systems are present in the area, for which either the locations are unknown or the rectifiers cannot be interrupted, resulting in IR-Drop errors in the off-potential measurement
- Sacrificial anodes are directly connected and cannot be interrupted, resulting in IR-drop errors in the off-potential measurement
- Long-line or telluric currents that result in IR-drop errors that interruption cannot eliminate
- Stray current that causes significant IR-drop errors in the off-potential measurement
- Structures utilizing polarization or depolarization criterion
- Appendix D1, Criteria for Cathodic Protection CFR 49 Part 192
- Locally corrosive areas in an otherwise noncorrosive environment
- Rapid IR spikes immediately following interruption that cause errors in the off-potential measurement
- Multiple pipelines in the same right-of-way that produce interference with one another
- The structure may be under the influence of alternating current
- No known CP problem exists, but additional information is desired

# PRODUCT TECHNICAL DETAILS & OPTIONS

## APPLICATION:

- CP measurements
- Structure-to-soil
- Instant off
- AC measurement
- IR drop
- AC current density
- Polarization decay

## WIRELESS NETWORK:

- LTE cellular
- Satellite availability

## SPECIFICATIONS:

- **Sensors:** Two coupons (If required)
- Reference electrode (Customer provided)
- **Temp:** -40°C to +70°C
- Sealed enclosure
- ±10 VDC input
- Up to 15-year Lithium Manganese Dioxide battery
  - Based on one set of readings per day, reported weekly

## SIZE:

- 4" diameter
- Telescoping 101" to 168" long (Transmission model)
- Partial Buried 36" to 52" long (Distribution model)

## INPUTS:

- Reference electrode
- Native potential coupon
- Protected coupon
- Structure



## CERTIFICATIONS:

- EMC: FCC Part 15, Class B
- Radio Compliance: FCC Parts 22 & 24
- Safety: UL 60950-1, IEC 60950-1
- Rated Class 1, Div. 2, C&D

## FEATURES:

- Waterproof design
- Easy to install
- OmniUpdate™ remote firmware updating
- Wireless to web
- OmniView®, secure website
  - Featuring ScopeView™
- Remotely programmable measure and report interval
- Up to 15-year battery
- Programmable depolarization delay: 1-6 days
- Signal strength displayed on website
- No custom software
- Mobile app for convenient monitoring

SmartStatus CP



**OMNIMETRIX**  
GLOBAL MONITORING + CONTROL

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