

# Electricity Communications Module Tester

## An Easy-to-use Tool for Testing Electricity Meters' Smart Grid Functionality

- » Leverages your existing meter test boards
- » Supports multiple barcode scanner options
- » Saves test data locally and enables hardcopy printouts and data export
- » Color codes (green and red) successful and unsuccessful test results in the user interface

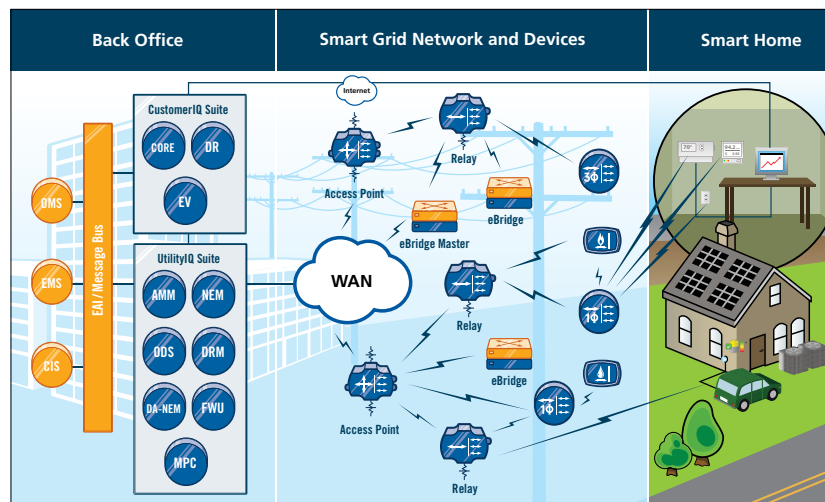
## Simple, accurate, and affordable testing for electricity meter communications

The Silver Spring Smart Energy Platform combines network infrastructure, software, and professional services to enable a range of smart grid applications. Silver Spring complements the network devices and UtilityIQ application suite with handheld tools to speed installation and troubleshooting.

The Electricity Communications Module Tester (formerly MANTIS) is a tool for verifying the operational status of the Silver Spring Communications Module in an electricity meter. When combined with a Silver Spring Field Service Unit and any method of powering an electricity meter, such as a meter test board, the tool enables the utility meter shop or test lab to sample test

inbound meters and to assess field return meters. By leveraging the meter shop's meter test boards, the tool automates the meter shop's test process and maximizes internal efficiencies.

The Electricity Communications Module Tester enables testing of most features through supported NetManager commands. It scripts the separate steps in the meter test procedure into a single test process command and stores the test results in a local database. This data may be exported to a file or printed. The result is an easy-to-use, production-ready test tool for the utility meter shop customer and others.



*An advanced, IP-based network enables the smart grid—from the data center to the customer premise.*

## About Silver Spring Networks

Silver Spring Networks is a leading Smart Grid solution provider that enables utilities to achieve operational efficiencies, reduce carbon emissions and empower their consumers with new ways to monitor and manage their energy consumption. Silver Spring provides the hardware, software and services that allow utilities to deploy and run multiple advanced solutions, including Smart Metering, Demand Response, Distribution Automation and Distributed Generation, over a single, unified network. The Silver Spring Smart Energy Platform is based on open, Internet Protocol (IP) standards, allowing continuous, two-way communication between the utility and devices on the grid. Silver Spring has numerous deployments with leading utilities in the US and abroad, including Florida Power & Light, Pacific Gas & Electric, Pepco Holdings, Inc., Jemena Electricity Networks Limited and United Energy Distribution, among others. For additional information, please visit [www.silverspringnetworks.com](http://www.silverspringnetworks.com).

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The screenshot shows the Mantis software interface. On the left, there are input fields for 'MAC Address' and 'Meter Badge Number'. Below these is a table with columns 'No #', 'MAC', 'Badge #', and 'Result'. The first row is green and shows '1', '00135001000393CB', 'NXA07646488100000', and 'OK'. The second row is red and shows '2', '091300FFEE59C', 'OK', and 'Failed test'. On the right, there is a 'Test Status' section with a 'Test User' field (containing 'rocky') and a 'Verification Script' pull-down menu (containing 'Focus/VerifyInstVoltage'). Below this is a list of test steps: 'Start', 'SetCurrentFSU(CATT)', 'RegRead(True)', and 'VerifyInstVoltage(115.435)'. At the bottom right, there is a progress bar and a 'Failed' indicator.

Utility staff can input the meters to be tested individually from the keyboard or with a barcode scanner, or they can load a list from a file.

The color-coded display shows green for successful tests, and red for failed tests.

The pull-down menu allows easy access to multiple test scripts.

The application shows the progression of the test steps, enhancing the ability to troubleshoot problems with field-returned meters.

*Electricity Communications Module Tester Interface*

Once the operator selects which test to run, it takes two barcode scans, one button press, and about two seconds to test the Communications Module's ability to read a meter register and to wirelessly communicate the results to the test operator.