

Field Service Tool

Immediate installation notification is critical to a successful AMI deployment. Without this functionality, system deployment can be an overwhelming task. The logistics of an installation can cost a utility substantial time and money regardless of whether the deployment is being performed by the utility or by an outsourced installation firm. Of the challenges facing AMI deployments, a primary concern is knowing whether an MIU installation is successful before the installer moves to a new location.

Other systems require days before an installation can be confirmed as successful. Even systems that can validate communication over the network and report it back in hours or even minutes are likely to be of little value since installers will likely not want to wait for the confirmations. Without immediate validation, MIUs that are not communicating properly with the network will require follow-up trips so that the installer can troubleshoot the previous installations.

This process can cause project costs to increase and inconvenience the homeowner.

Neptune's Field Service Tool (FST) eliminates this problem entirely. The FST is a handheld-based device with an integrated 450 MHz transceiver that utilizes the two-way communication to confirm an installation is successful before the installer leaves the site. Upon a magnet swipe, the R450™ MIU sends a signal which is received by all collectors within range. The collector which records the best RSSI (Received Signal Strength Indication) sends a signal back in response. The FST records this communication in real time and supplies the installer with a green light for successful installation or a red light indicating that signal strength isn't optimal for two-way communication. This information is provided as part of the normal installation procedure, resulting in instantaneous validation of the installation.

Additionally, receiving this information as part of the install process allows the installer to make adjustments if needed so that the MIU will be successfully received by the collector. These adjustments are often as simple as altering the location of the MIU or antenna.

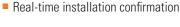
Many systems claim to save your utility time and money in the long-run but only Neptune can save you both from day one.

BENEFITS

FEATURES

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- Lowers installation costs
- Decreases AMR/AMI deployment time
- Optimizes installation for two-way communication
- Reduces the number of truck rolls due to improper installation
- Reduces homeowner inconvenience



- MIU simulator
- Collector simulator
- Integrated 450 Mhz transceiver
- Handheld-based for in-field use



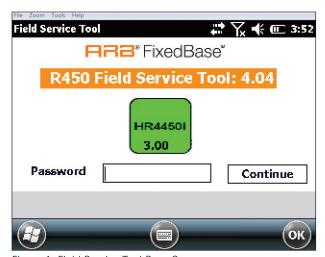


Figure A. Field Service Tool Start Screen

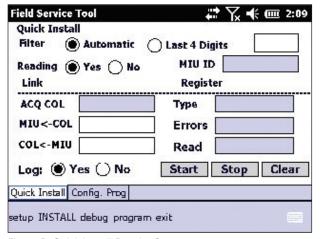


Figure B. Quick Install Results Screen

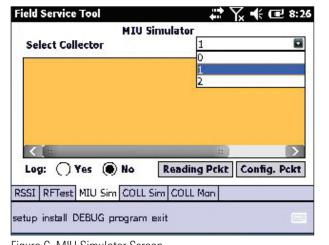


Figure C. MIU Simulator Screen

Figure A. The security verification in the Field Service Tool ensures that only authorized personnel can interact with the system.

Figure B. Upon a magnet swipe of the R450 MIU, the FST will record the two-way communication between the collector and MIU in real time. The results are displayed on this screen. If the installation was successful, this box will be highlighted green. A red highlight indicates that the installer would need to alter the location of the MIU/antenna.

Figure C. The MIU Simulator allows the user to simulate an MIU transmission in order to test an R450™ Data Collector (DC). This can be used to confirm a DC is fully operational once it has been installed.

Neptune Technology Group Inc. 1600 Alabama Highway 229 Tallassee, AL 36078

USA Tel: (800) 633-8754 Fax: (334) 283-7293 Neptune Technology Group (Canada) Ltd.

7275 West Credit Avenue Mississauga, Ontario L5N 5M9 Canada Tel: (905) 858-4211 Fax: (905) 858-0428 Neptune Technology Group Inc. Avenida Ejercito Nacional No 418 Piso 12, Despacho 1203 Colonia Polanco V Sección C.P. 11560 Delegación, Miguel Hidalgo Mexico D.F. Tel: (525) 5203-4032 / (525) 5203-6204

(525) 5203-5294 Fax: (525) 5203-6503



neptunetg.com