

# **Certification Exhibit**

#### FCC ID: R7PFTAR1S1 IC: 5294A-FTAR1S1

#### FCC Rule Part: 15.247 IC Radio Standards Specification: RSS-210

ACS Project Number: 14-0447

Manufacturer: Landis+Gyr Technology, Inc. Model: Field Tool Adapter

# Manual

# Draft 1/19/2015

NAM Field Tool Adapter (Comms Adapter) Quick Start Guide

Publication: 98-1544 Rev AA

# Landis |Gyr<sup>+</sup>

LANDIS+GYR CONFIDENTIAL INFORMATION

# Draft 1/19/2015

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NAM Field Tool Adapter (Comms Adapter) Quick S	Start Guide			
Publication: 98-1544 Rev AA				
Revision History				
Modification Date	Revision	Description	Author	
11/25/2014	AA	Work In Progress	Vicky Costello	
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# Draft 1/19/2015 Field Tool Adapter Landis (Comms Adapter)

## **Product Description**

The Field Tool Adapter (Comms Adapter) is a lightweight, compact device that is designed to ensure comfortable carrying and holding by the tool user. The adapter tool is capable of decoding one-way and two-way networks in a Gridstream environment. The device also incorporates a bluetooth module that provides communication to the tool device (tablet or laptop) and eliminates the need for serial cable connection. Two-way communication with the adapter provides the capability to transmit and receive data from AMI endpoints. One-way communication operates in a listener mode and provides ability to decode packets from AMR devices including gas and water modules.

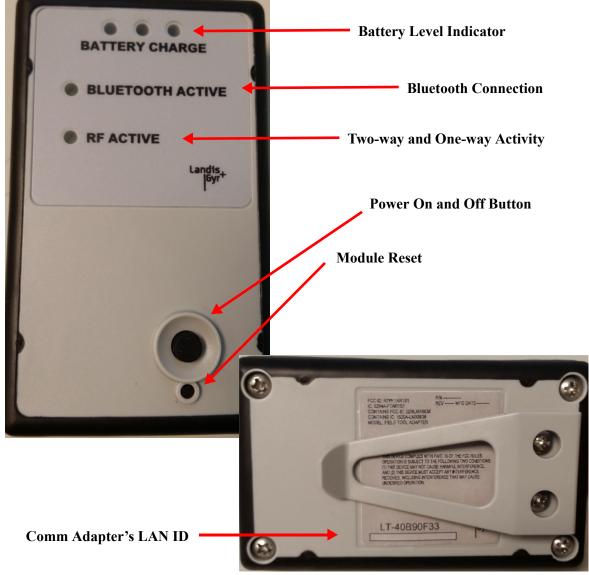


Figure 1. Field Tool Adapter (Comms Adapter)

**(i)** 

NOTE: The LAN ID is a unique identifier for each endpoint. It always displays in hex. Landis+Gyr provides the LAN address. You cannot change the LAN ID of a radio.



NOTE: The device was designed to operate at close range in order to minimize interference from unwanted readings while troubleshooting in the field.

The Field Tool Adapter (Comms Adapter) kit includes a battery charger.



Figure 2. Field Tool Adapter (Comms Adapter) Kit

#### **Required Software**

For specific software and firmware questions, contact your Program/Project Manager directly or your Customer Account Representative.

# **Getting Started**

To establish communication with the Field Tool Adapter (Comms Adapter), perform the following steps:

- 1. Press and hold the power button on the right-hand side to turn the adapter on.
- 2. Establish bluetooth communication with the tablet/laptop:
  - A. From the Devices and Printers tab, locate or show the bluetooth devices.

A list of bluetooth devices is displayed.

- **B.** Select **Add a Device** to choose the device that corresponds to Gridstream followed by the LAN ID printed on the back of the Field Tool Adapter (Comms Adapter).
- C. Enter PIN (0000) to add the device.
- D. Double-click the device once it is added to the Show Devices tab.
- **E.** Click the **Hardware** tab to obtain the COM port number that is used to set up communication with the software tools (COM port).

Once the bluetooth is successfully paired/connected, the Field Tool Adapter (Comms Adapter)'s Bluetooth Active LED will illuminate.

## **General Usage**

The Field Tool Adapter (Comms Adapter) provides field technicians with full mobility to perform field tool related activities at the site location of the endpoint. Once the tool software is activated, the Field Tool Adapter (Comms Adapter) is ready to receive information from an electric, gas, or water meter. One-way communication is initiated by the swipe of a magnet to the unit being interrogated. Two-way communication occurs when the field tool requests information from the unit being interrogated.

## **General Specification**

### Field Tool Adapter (Comms Adapter) Specifications

Element	Description		
Battery Life	<ul> <li>Normal use is 10 hours.</li> <li>The battery charge level is indicated on the front of the device.</li> <li>To view battery and charging status:</li> <li>Green indicates the battery is fully charged.</li> <li>Yellow indicates the battery is half charged.</li> <li>Red indicates the battery is low and needs charging.</li> </ul>		
RF Output Power	10 milliwatts for close range connection		
One-Way Reception Range	0 to 8 feet from water or gas meter		
ED 1 Green for One-Way and Two-Way (displayed on front of a 1 Blue for Bluetooth active connection			

#### **Table 1. Product Specification**

# **FCC Compliance Information**

#### **Compliance for Class B Devices**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult dealer or an experienced radio/TV technician for help.



WARNING: Changes or modifications to this device not expressly approved by Landis+Gyr could void the user's authority to operate the equipment.

### Portable Device RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment is in direct contact with the body of the user under normal operating conditions. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **Industry Canada Statements**

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### FCC & IC

FCC ID: R7PFTAR1S1

IC: 5294A-FTAR1S1

#### For the Bluetooth module:

Contains FCC ID: ED9LMX9838

Contains IC: 1520A-LMX9838

Model: Field Tool Adapter

#### FCC Two Part Statement Label

The FCC label can be located on the back of the Field Tool Adapter (Comms Adapter).

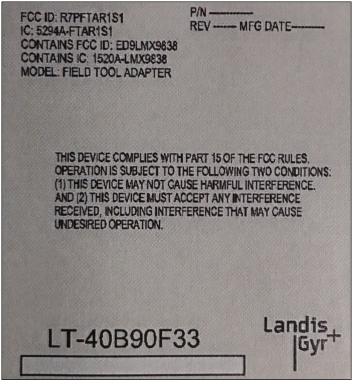


Figure 3. FCC Two Part Statement Label