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Stealth Reader®

Stealth Reader GMIU
Users Guide

Rev 2

NOTICES

Patents

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FCC Compliance

FCC ID: 2ACOA-GM1
FCC ID: 2ACOA-GM3
IC ID: 26631-GM3

Note: 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 this 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- This device may not cause interference; and
- This device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de license. L'exploitation est autorisée aux deux conditions suivantes:

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Attention: les changements ou modifications non expressément approuvés par le fabricant peuvent annuler le droit de l'utilisateur à utiliser l'équipement.

To comply with FCC RF exposure requirements, the device and the antenna for this device must be installed to ensure a minimum separation distance of 20 cm or more from a person's body. Other operating configurations should be avoided.

Pour se conformer aux exigences d'exposition RF FCC/IC, l'antenne utilisée pour cette radio doit être correctement installée et entretenue. Elle doit respecter une distance minimum de 20 cm de l'utilisateur et ne doit pas être installée à proximité ou utilisée conjointement avec tout autre antenne ou émetteur. N'utilisez pas votre radio si vous ne respectez pas la distance spécifiée.

Introduction

Stealth Reader networks are used for remote monitoring of commercial, industrial, and municipal equipment such as automatic utility metering. Hundreds of thousands of devices are currently being monitored by Stealth Reader networks.

Quick Tour

The Stealth Reader GMIU is powered by two lithium-thionyl chloride ($LiSOCl_2$) batteries. The Stealth Reader electronics are permanently encased in a urethane potting compound to protect them from water and chemicals.

American

Rockwell

Procedure

Connecting to the Register

The Stealth Reader GMIU is mounted directly to the gas meter with 4 screws. The motion of the register dog or gear is transferred to the register through the Stealth Reader GMIU with a matching shaft. The reading are recorded by counting the sweep of an indexing magnet.

Supplies/Equipment

In order to install the Stealth Reader properly the following Equipment is needed:

- The Stealth Reader
- Stealth Handheld
- Flat Screwdriver
- Phillips Screwdriver
- Razor Scraper

Installation

This section covers the installation of the Stealth Reader and the mounting process.

American Meter

Preparation – American Meter
Remove the Register and Index from the gas meter.
Scrape the old gasket from the gas meter register areas.

Verify that the Index Pin magnet is in place.
Insert the Meter Pin through the Stealth Reader GMIU from the rear.
Insert the Index Pin through the Stealth Reader GMIU from the front.
Snap the Meter Pin onto the Index Pin.
The Meter Pin and the Index Pin assembly may be appear to be tight when snapped together but this motion will loosen when the Stealth Reader GMIU is installed because the case halves will be pressed together.

Install the Index onto the Stealth Reader GMIU.
Verify that the register engages the Index pin either through the slot or onto the pin.

Place 4 1/4-20x3 screws through the new index cover and through the Stealth Reader GMIU.
Install the Stealth Reader GMIU on the gas meter.
Verify that the Meter pin engages the meter dog either through the slot on onto the pin by rotating the Meter Pin.
Tighten the 1/4-20 screws in an “X” pattern until secured.
Install 2 tamper caps.

Rockwell Meter

Preparation – Rockwell Meter

Remove the Register and Index from the gas meter.
Determine the number of teeth on the register gear.
Match the gear to the appropriate index gear.
Scrape the old gasket from the gas meter register areas.

Verify that the Index gear magnet is in place.
Insert the Meter Gear through the Stealth Reader GMIU from the rear.
Insert the Index Gear through the Stealth Reader GMIU from the front.
Snap the Meter Gear onto the Index Gear.
The Meter Gear and the Index Gear assembly may be appear to be tight when snapped together but this motion will loosen when the Stealth Reader GMIU is installed because the case halves will be pressed together.
Install the Index onto the Stealth Reader GMIU.
Verify that the register engages the Index Gear by rotating the meter gear.

Place 4 10-24x3 screws through the new index cover and through the Stealth Reader GMIU.
Install the Stealth Reader GMIU on the gas meter.
Verify that the GMIU Meter gear engages the gas meter gear.
Tighten the 10-24x3 screws in an “X” pattern until secured.
Install 2 tamper caps.

Configuration

Stealth Reader installations are performed using a Stealth Handheld. The Stealth Handheld guides installers through the installation process, records the details of each installation, and tests and configures installed Stealth Readers.

Whether performing as-needed installations or work-order assigned installations, the process is similar and is described in the SR Handheld Users Guide.

Shipping and Handling

Stealth Readers contain Lithium batteries which are hazardous and have transportation restrictions. Check with your carrier before shipping.

Specifications

Environment:

- Do not exceed the temperature range of -40C to +85C.

Battery: 2 Tadiran LiSOCl2 Batteries
Battery Life: 10+ years