

# REXUniversal<sup>®</sup> meter with wireless 3G cellular communications

IL42-4045A

## General

This leaflet provides general information for the Wireless WIC communication option for the REXUniversal meter. For information on installing the REXUniversal meter, see the "REX<sup>®</sup> Meter Family Installation Instructions" (IL42-4026H or later).

The REXUniversal meter may be ordered with a wireless cellular communication option: the Wireless WAN Interface Card (Wireless WIC). The Wireless WIC is available in CDMA 1xRTT/1xEV-DO and UMTS/HSPA+ versions, providing a high speed, 3G cellular communication channel for the meter. Additional hardware configurations may include an internal service control switch and control board for standard REX<sup>®</sup> meters.

The REXUniversal meter with Wireless WIC communication may be ordered in the following configurations:

Description	Model number <sup>1</sup>
REXUniversal meter, CDMA 1xRTT/1xEV-DO, internal WAN antenna	RXUEV_
REXUniversal meter, CDMA 1xRTT/1xEV-DO, internal WAN antenna Additional option: internal service control switch	RXUEVDC_
REXUniversal meter, UMTS/HSPA+, internal WAN antenna	RXUUM_
REXUniversal meter, UMTS/HSPA+, internal WAN antenna Additional option: internal service control switch	RXUUMDC_

<sup>1</sup>The last character in the model number is carrier dependent.

### **⚠ WARNING**

Use authorized utility procedures to install and service metering equipment. Dangerous voltages are present. Equipment damage, personal injury, or death can result if safety precautions are not followed.

Use circuit closing devices on current transformer secondaries (3S & 4S meters). Equipment damage, personal injury, or death can result if circuit closing secondaries are not used.

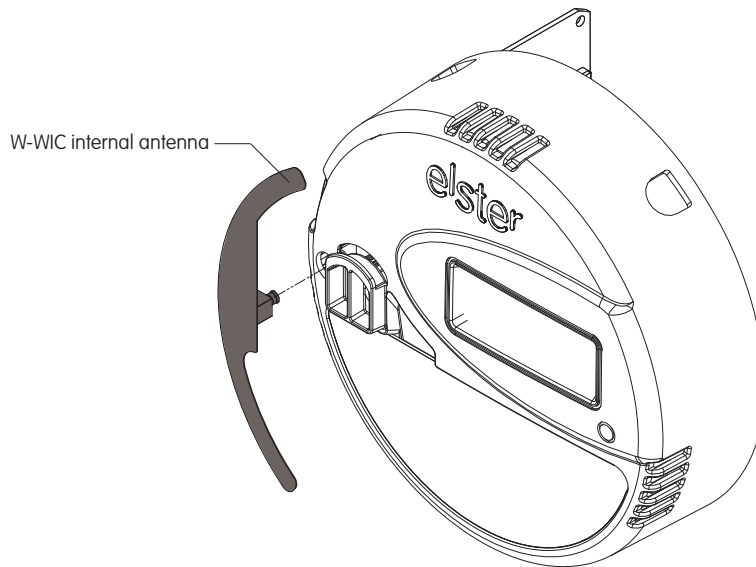
## Location of antenna

See Figure 1 for the location of the Wireless WIC internal antenna.

The Wireless WIC internal antenna is fix-mounted to the periphery of the REXUniversal meter's electronic housing. The Wireless WIC antenna is not adjustable or removable.

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Figure 1. Location of internal antenna



## Placing the REXUniversal meter with Wireless WIC into service

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### **⚠ WARNING**

Use authorized utility procedures when placing the standard REXUNIVERSAL meter into service. Equipment damage, personal injury, or death can result if authorized utility procedures are not followed.

See IL42-4026H or later for the REX Meter Family meter installation instructions. When planning the meter installation, consider the following additional guidelines:

- Since the Wireless WIC and EA\_LAN (if present) are high frequency communication devices, site the meter so that the front of the meter has the best possible view of the surrounding terrain.
- Do not place metal structures (other than the meter socket and related cabling) within 20 cm of the meter.

After the REXUniversal meter is installed and powered as instructed in IL42-4026H or later, the installation is complete. To verify operation of the Wireless WIC on-site, the following steps may be taken:

- 1 After installing and powering the REXUniversal meter, wait approximately 5 minutes for the Wireless WIC to connect to the cellular network and initialize.
- 2 Using Metercat and an optical probe connection, perform a diagnostic read. Be sure the WAN Configuration view is included in the viewset. For information on using Metercat and performing diagnostic reads, see the Metercat software documentation or online Help.

3 Once the diagnostic read is performed, open the viewset with the WAN Configuration view. Several operational parameters are provided, including the following:

Item	Expected status
Status	"Connected" means that the W-WIC is registered to a wireless network.
Received Signal Strength Indicator	The RSSI may vary between 0 and 31, with 31 indicating the best possible signal strength. An RSSI value of 99 indicates an unknown or non-detectable signal.
WAN IP address	The IP address provided by the cellular network.

## FCC Compliance

### Important

The REXUniversal meter equipped with the Wireless WIC option complies with Part 15 of the FCC Rules. Changes or modifications not expressly approved by Elster could void the user's authority to operate the equipment.

### FCC & IC Information

For CDMA 1xRTT/1xEV-DO versions of the REXUniversal meter and the Wireless WIC option:

- FCC ID: QZC-RXUEV
- IC: 4557A-RXUEV

For UMTS/HSPA+ versions of the REXUniversal meter and the Wireless WIC option:

- FCC ID: QZC-RXUUM
- IC: 4557A-RXUUM

### Compliance Statement

This device complies with Part 15 of the FCC Rules and Class B digital apparatus requirements for ICES-003. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

### Énoncé de conformité

Cet appareil est conforme à la Partie 15 des règles de la FCC et aux exigences relatives aux appareils numériques de classe B conformément à l'avis sur la compatibilité électromagnétique ACEM-3. L'utilisation de cet appareil est soumise aux deux conditions suivantes : (1) Cet appareil ne doit pas provoquer d'interférences nocives et (2) cet appareil doit accepter toutes les interférences reçues notamment celles pouvant provoquer un fonctionnement intempestif de l'appareil.

### 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 and ICES-003. 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 the receiver
- connect the equipment into 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

If you experience trouble with this equipment, please use the Return Material Authorization (RMA) feature available from the customer support section of [www.elstersolutions.com](http://www.elstersolutions.com). Do not attempt to repair this equipment yourself.

### Caution

The antennas used for these transmitters must be installed to provide a separation of at least 20 cm from all persons and must not be collocated or operated in conjunction with any other antenna or transmitter except as documented in the FCC application. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

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