## Water Module Installation Instructions

## General

This leaflet contains instructions for Elster's water meter module (see Figure 1) for use on water meters to provide readings to the EnergyAxis System. For proper installation and maximum life of the modules, use the following procedures. All modules are programmed and sealed at the factory before shipment.

Familiarize yourself with the location and identification of the terminals on the water meter register before any installation procedure.

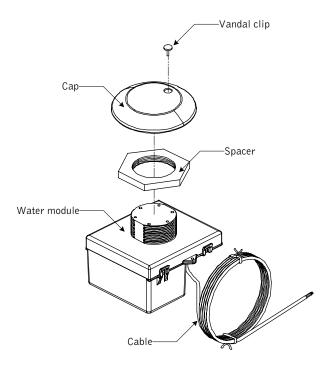


Figure 1. EnergyAxis water meter module

## Installation

### **Direct (Integral) Mounting**

The water module is shipped pre-wired and attached to a new water meter. Install the water meter with the EnergyAxis water module as you would any other water meter.

### **Pit Applications**

The water module is shipped pre-wired to the new water meter. However, it is necessary to mount the water module to the pit cover. The water module is designed to fit standard  $(1-^{7}/_{8} \text{ inch diameter})$  holes in pit covers.

- 1. Unscrew the cap from the water module. The dome-like cap is fitted to a threaded cylinder on the top of the module.
- 2. Adjust the spacer nut as necessary to account for the thickness of the pit cover, leaving the threaded cylinder protruding above the cover to screw the cap on.
- 3. Insert the water module's threaded cylinder through the pit cover hole from the inside of the cover.

- 4. Screw the cap onto threaded cylinder. This will secure the water module to the pit cover.
- 5. Insert the vandal clip into the cap. It may be necessary to twist the water module cap slightly to make sure the vandal clip is flush with the cap.

Composite pit covers do not require a hole in the cover. These covers have a shelf on the inside of the cover for water AMR modules. If you are using composite pit covers, slide the EnergyAxis water module through the slot on the shelf.

#### **Remote Connections**

The water module is shipped along with an enclosure housing. The enclosure housing must be installed, and then the water module cable must be connected to the water meter register.

Terminal color	Function
Black	Power
Red	Data
Bare	Common

The EnergyAxis water module register connections are as follows:

- 1. There is a label temporarily placed on the water module. Before placing the water module inside the enclosure housing, remove this label and place it on a visible area of the enclosure housing.
- 2. Place the module inside of the enclosure housing (Elster style number 1C11748H01) provided with the module. Keep the threaded cylindrical portion of the water module pointing up and slide the module into the enclosure. The enclosure housing should be held with the arrow on the top of the housing pointing up while the module is inserted.
- 3. With the module secured within the enclosure housing, mount the assembly using the mounting bosses that are on the sides of the housing. Screws are not included and should be provided by the utility. It is preferable to mount the housing outside and above ground; otherwise, mount the housing as high as possible.
- 4. Connect the black wire to the terminal on the water meter register identified as DATA. Typically, this connection is done by placing the wire under the screw terminal and tightening down securely. See the product information for your water meter register for more information.
- 5. Connect the red wire to the terminal on the water meter register identified as POWER. Typically, this connection is done by placing the wire under the screw terminal and tightening down securely. See the product information for your water meter register for more information.
- 6. Connect the bare wire to the terminal on the water meter register identified as COMMON. Typically, this connection is done by placing the wire under the screw terminal and tightening down securely. See the product information for your water meter register for more information.
- 7. If the standard 6-foot cable is not sufficient, splice the cable using a weatherproof gel cap (for example, 3M style number 314 IDC) to provide greater length. The total cable length should not exceed 100 feet.

# Notes

#### FCC and Industry Canada Compliance

**Compliance Statement (Part 15.19):** The REX water module complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

Warning (Part 15.21): Changes or modifications not expressly approved by Elster Electricity, LLC could void the user's authority to operate the equipment.

**RF Radiation Safety Guidelines per Part 2 of FCC Rules and Regulations:** The module should be installed in a location where there will be a separation greater than 20 cm from locations occupied by humans.

User Information (Part 15.105): The REX water module 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, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Move the receiving equipment farther away from the REX meter.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Statement: The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

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