

DESCRIPTION

APPLICATIONS: The Itron 60W endpoint is designed for both submerged pit-set and wall mount water meter reading applications. As an assembled unit, Badger's 60W solution includes the Absolute Digital Encoder (ADE®) and the Itron 60W endpoint. As an option, the customer may purchase the 60W endpoint directly hardwired to a Badger® encoder register with 5' of wire or with the Itron in-line connector. The 60W enclosure allows the product to be installed below a lid, through a lid, or on a wall mount application with the appropriate installation kit.

OPERATION OVERVIEW: The 60W endpoint is a transmitter designed to accumulate consumption readings, obtain tamper information, and report potential continuous usage occurrence with bubble up RF technology. Approximately every seven seconds, the 60W endpoint transmits a standard consumption message (SCM) at approximately +10dBm between 910-920 MHz. The 60W supports protocols for a variety of meter manufacturers' absolute/mechanical encoder registers including Badger Meter's ADE, Hersey®, Neptune®, Metron-Farnier®, and Sensus®.

The 60W also provides utilities with the following features:

Leak Detection The 60W endpoint will continually compare hourly encoder readings. The 60W provides notification to the meter in its SCM if a zero consumption (equal to previous read) doesn't occur over a period of seven days.

Tamper Indication The 60W provides a cut cable alarm as part of its SCM, if the endpoint is disconnected and cannot communicate with an encoder register over a period of 24 hours.

Reverse Flow Detection The 60W compares the hourly read with the previous read. If the current read is less than the previous read, the 60W endpoint will report as part of its SCM that a reverse flow condition occurred.

BATTERY LIFE: The 60W is powered by a non-replaceable long life dual lithium battery pack that has an expected battery life of approximately 20 years.

INSTALLATION OPTIONS: The 60W includes integral fasteners for mounting the endpoint below compatible meter pit lids atop either standard-dimension rebar or cable tied to other PVC material. The 60W can also be screw fastened to a flat surface or, by snapping on the optional pit lid adapter, mounted through metal lids with a hole 1 7/8" in diameter. The 60W endpoint does not require the utility to maintain an FCC license.

Rod Mount Adapter Rod mount installation allows the endpoint to be mounted to a 3/8" outside diameter length of pipe or rebar that has been driven into the ground at least 12".

Wall Mount Wall mount installation attaches the endpoint to a wall or other surface with a meter pit.

Pipe Mount The pipe mount allows the 60W endpoint to be installed on a pipe.

Through Lid Used in conjunction with the through lid installation kit, this option allows the 60W endpoint to be mounted through a 1 7/8" hole in a pit lid.



Itron® 60W Endpoint with M25 and ADE® encoder

SPECIFICATIONS

FUNCTIONAL

- Power Source: Two "A" cell lithium batteries rated for 20-year operation
- Meter Register Polling Interval: Hourly
- Operating Temperatures: -40°F to +158°F (-40°C to +70°C)
- Storage Temperatures: -40°C to + 75°C for maximum of 1,000 hours
- Humidity Limits: 0 to 100% (submersible)
- Maximum Register Cable Dimension: 300 feet with Itron-approved cable and splice connectors
- Meter Compatibility: Encoded-register water meters as documented in Itron Water ERT Module Compatibility List

TRANSMISSION PARAMETERS

- Data Message: Multiple RF channel transmissions of meter register value, register communication (cut cable) status, leak and reverse-flow messages broadcast every seven seconds
- Cut Cable/Communication Error Message: Enabled after 24 consecutive, unsuccessful, hourly register communication attempts
- Transmitter Frequencies: 910 – 920 MHz @ +10 dBm (10 milliwatts)

APPROVED READING DEVICES

- Network System: Itron Fixed Network CCU Version4 and Data Repeaters
- Drive-by System: Itron Mobile Collection System and Mobile Field Collector
- Walk-by System: Itron G5R and FC200R Handheld Computers

DIMENSIONS

- Height: 4.5 inches
- Maximum Diameter: - Lower: 2.90 inches
- Upper: Approx. 1.70 inches
- Weight: Approx. 5.5 oz.
- Endpoint Cable Length with In-line Connector: 6 inches
- Endpoint Cable Length without In-line Connector: 5 feet
- Register Cables for Use with In-line Connector: 5 feet and 20 feet

MOUNTING OPTIONS

- Custom-fastener slots for future attachment to OEM mounting adapters
- Top-mount to standard 3/8" reinforcing rod (re-bar)
- Wall-mount to suitable backing material with user-supplied mounting screws
- Through meter pit/box lids with optional snap-adapter and security clamp for 1 7/8" diameter holes up to 2.5" maximum lid thickness
- Side-mount to either 3/4" or 1" PVC pipe via user-supplied plastic cable ties

REGULATORY AND STANDARDS

- FCC Part 15.247
- Industry Canada #210, Section 6.2.2(o)

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