

DESCRIPTION

APPLICATIONS: The Itron 60W pit endpoint is designed for submerged pit-set water meter reading applications for use with either the Absolute Digital Encoder (ADE®) or the Recordall® Transmitter Register (RTR®). 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.

The Itron 60W indoor endpoint is designed for remote or integral non-submerged applications for use with Badger's ADE or RTR register. When assembled, the 60W indoor endpoint is provided with a standard cable length of 10' for remote applications or without any exposed wire for indoor integral applications.

OPERATION OVERVIEW: The 60W pit and indoor endpoints are 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 pit and indoor endpoint also provides utilities with the following features:

Leak Detection The 60W endpoint will continually compare readings in the endpoint looking for continuous usage patterns. 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 The 60W provides reverse flow notification when the stored reading in the transmitter is less than the latest reading provided by the encoder (ADE feature only).

BATTERY LIFE: The 60W pit and indoor endpoint is powered by a non-replaceable long life dual lithium battery pack.

INSTALLATION OPTIONS: The 60W pit endpoint 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 pit endpoint 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.

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 Pit Endpoint



Itron® 60W Indoor Endpoint

Integral Mount Each RTR and ADE encoder register purchased for connectivity to the 60W endpoint comes with an integral bracket mount assembly built into the register shroud assembly.

The 60W indoor endpoint allows ease of installation in any remote or integral, non-submerged application. 60W remote endpoints are provided with a standard 10' cable that allows the device to be mounted to any non-metallic surface. Additional cable lengths are available upon request.

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, 60W pit endpoint only), 0 to 95% (non-condensing, 60W indoor endpoint only)
- 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 FC200SR Handheld Computers

DIMENSIONS

60W Pit Endpoint

- Height: 4.5 inches
- Maximum Diameter: - Lower: 2.90 inches
- Upper: Approx. 1.70 inches
- Weight: Approx. 5.5 oz.
- Endpoint Cable Length for Integral: Approx. 11 inches
- Endpoint Cable Length without In-line Connector: 5 feet
- Register Cables for Use with In-line Connector: 5 feet and 20 feet

60W Indoor Endpoint

- Enclosure: 4.5" x 4.5" x 1.75" Box Style
- Cable Length: 10' Standard, other lengths available upon request

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-adaptor 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
- Customer supplied fasteners to non-metallic surface

REGULATORY AND STANDARDS

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

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www.badgermeter.com
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