

# Encoder or Digital Register with 50W-2 Pit Mounted Radio Module



**Functional:**

Power source: two "A" cell lithium batteries

Radio programming parameters:

- 50W-2 programmed to Wake-Up Mode: utility ID, wake-up tone, lock level and register variables
- 50W-2 programmed to Bubble-Up Mode: same as above with addition of bubble-up rate (factory default 3 seconds), and encoder latency (factory default 1 hour for encoded registers).

\*Refer to ReadOne® Pro ERT Programming Guide for further details

Tamper detection: Cut Cable/No Read Indicator is available for all models

Operating temperatures: -40°F to +158°F (-40°C to +70°C)

Operating humidity: 0 to 100% (submersible)

Product identification: numeric and bar coded ERT module serial number

Approved Reading Devices

(for 50W-2 mounted through pit lid or under thin walled plastic pit lid)

| Mode       | MC | FC200 | G5R | FS3PN | FS2PN |
|------------|----|-------|-----|-------|-------|
| Wake-Up    | X  | X     | X   | X     | X     |
| Bubble-Up* | X  | X     | X   |       |       |

| Mode       | MicroNetwork | Fixed Network |
|------------|--------------|---------------|
| Wake-Up    | X            | X             |
| Bubble-Up* | X            |               |

\*If using the 50W-2 in bubble-up mode and an FCC license has not been obtained, the reading device must not transmit a wake-up signal. Customers using the MC, FC200 or G5R in bubble-up mode without an FCC license must be using MVRs software, version 5.0.1 or higher. Refer to installation manual for reading device for instructions on disabling the transmitter.

Regulatory & Standards

FCC compliance: Part 15 certified

The 50W-2 ERT® module for pit-set water meters is the data collection endpoint device for Itron's radio-based handheld, mobile AMR and network AMR systems. With its innovative dual-mode operational capability, the 50W-2 provides unrivaled flexibility, battery life and ease of use.

The 50W-2 encodes accurate consumption and tamper information from the water meter. To provide maximum flexibility to users, the 50W-2 can be programmed to communicate with Itron meter reading technologies in either "wake-up" mode or "bubble-up" mode. When used in wake-up mode, it waits for a wake-up signal over a radio frequency and then automatically transmits metering data to a radio-equipped handheld computer or Mobile Collector (MC) AMR units, as well as Itron Fixed Network and MicroNetwork data collection solutions. In bubble-up mode, the ERT transmits a continuous stream of information and can be read by Itron's Mobile Collector, FC200, G5R handheld, or fixed base MicroNetwork. When used in bubble-up mode, the 50W-2 module does not require an FCC license to operate.



Operational:

Receive frequency (for product used in wake-up mode): 952-956 MHz  
Transmit frequency: spread spectrum 910-920 MHz  
- FCC license is required if a wake-up signal will be sent from reading device (for product used in wake-up mode)  
- No FCC license is required if product is used in bubble-up mode

Meter Compatibility

C700 Positive Displacement with encoder or digital register  
Series T3000 Class II Turbine meters with encoder or digital register  
C3000 Compound meters with encoder or digital register  
AquaMaster

The 50W-2 ERT pit module is attached directly to the meter and contained within the pit. It features a rugged, low profile dome transmitter designed to provide reliable meter reading performance. The module features a tough, die cast aluminum shell and nylon housing with specially coated electronics designed to protect the unit and deliver superior performance from the harsh pit environment.

The 50W-2 is powered by two long-life, replaceable "A" cell lithium batteries. Estimated battery life for the 50W-2 when used in bubble-up mode is a minimum of 10 years. Estimated battery life when used in wake-up mode is 20 years, which is the same as the life expectancy of the ERT module, meaning battery changeout programs will not be necessary. To maximize installation efficiency, Elster AMCO offers all applications and related hardware to support automation of the installation process. Elster AMCO also provides easy-to-use file interfaces to support the upload and download of information to utility billing systems.

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