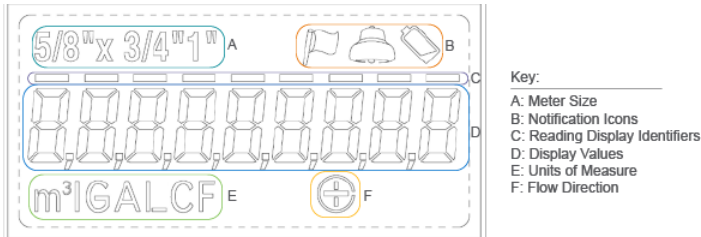


How to Read the Electronic Register+

Quick Guide

The Sensus® Electronic Register+™ provides greater reliability, higher-resolution readings and more advanced features than any other electronic register previously available.

Register Display



Display Options

Meter Size	5/8", 5/8"x3/4", 3/4" or 1" available
Notification Icons	Flag: Indicates a recent alarm event has occurred. Bell: Indicates an active alarm event. Battery: The battery is near end of life, at end of life or has low battery volts.
Reading Display Identifiers	Indicates which digits in the display value are reported to an AMR/AMI system.
Display Values	Up to 9 digits
Unit of Measure	Gallon, Cubic Feet, Cubic Meter, Imperial Gallon available
Flow Direction	Shows Positive and Negative Flow

Available Views

The Electronic Register+ LCD contains dedicated display areas for information and icons. Multiple views are available; you lift and close the lid to toggle through the various views.

The Electronic Register+ supports the following views:

- Segment Test View
- Totalizer View
- Notification View (for alarms)
- Flow Rate View

Register Operation

1. Open the lid to activate the register display. The first view that appears is the Segment Test View. This will be visible for a second and show all the various display areas before changing to the Totalizer View.
2. To change the view, close the lid for at least a second and then reopen the lid. The next view in the sequence will appear on the screen. There is a 30-second window for changing from view to view.
3. If the lid is left open the display will shut off after 30 seconds. Once the display has timed out the display will automatically return to Segment Test View next time the lid is opened.
4. The Totalizer View is the main display view. It shows the meter size, any notifications, the display values and identifiers, the unit of measure and flow direction. The LCD displays nine digits, but only the digits that have a identifier bar above them will be reported to the system.
5. To view alarms (Notification View), close and open the lid within the 30-second period. Alarms are identified by an "AL" on the left side of the display. Any active and recent alarm codes will be listed next to the AL in order of occurrence. If the alarm code is blinking, the alarm is active.
6. To view the flow rate (Flow Rate View), close and open the lid within the 30-second period. Flow rate is identified by a "FL" on the left side of the display followed by the actual flow rate unit. In addition, the display shows the unit of measure (gallon, cubic feet, etc.) and the flow icon.

Flow Direction Icons

Positive Flow	+ with circle	
Negative Flow	- with circle	
No Flow	No circle, + or -	

Notification View

The Notification View is used to provide more information about any alarm events. This is in addition to the bell and flag icons appearing on the LCD.

The first two digits on the left in Notification View display "AL" at all times, followed by a space. The remaining six digits in the line display the alphanumeric symbol for active and recent alarms, with the active alarms displayed first on the right. The alarms are displayed from right to left. Active alarms are followed by recent alarms, with the most recent the first displayed after any active alarms. Active alarms on and off in a .5 second interval while recent alarms do not flash. Only six alarms or events can be displayed at a time.



Active Alarms Flash



Recent Alarms Stay in Solid State

Alarms

Event/Alarm Type	Description	LCD Display Value
Customer Leak	Triggers when the flow rate through the meter meets or exceeds the configured value for the configured period of time. The configuration is set by the customer.	L
High Flow	Triggers when the flow rate through the meter meets or exceeds the set value for the set time. The set value and time are configurable and are dependant on meter size. Could be a broken pipe.	H
Reverse Flow	Triggers an alert when there is a consistent reverse flow for a specified period of time. The alarm is configurable in magnitude and duration.	r
Battery Near End of Life	Triggers when the product is near the end of the expected product life based on years. The battery icon will always be "on" when this alarm is triggered.	b (also displays battery icon)
Battery Beyond End of Life	Triggers when the product has reached the end of the expected product life based on years. The battery icon will be flashing when this alarm is triggered.	b (also displays battery icon)
Low Metrology Battery Volts	Triggers when voltage supplied to the metrology is running low.	b (also displays battery icon)
Magnetic Tamper	Triggers when an attempt to tamper with the meter through use of a magnet is detected.	t
Register Removal Tamper	Triggers when an attempt to remove the register is detected.	t
Fault	There may be an issue with the meter. Contact Technical Services for more information.	F
Replace Meter Events / RMA	The meter operation has been compromised. Contact Technical Services for more information.	E

Totalizer View: Unit of Measure

The display values in the Totalizer View are customizable. The following shows what will be displayed on the screen depending on the unit of measure, and what place value the digits have depending on that unit of measure.

Gallon Register

