



100C LTE-M CELLULAR AMI REMOTE SMART VALVE

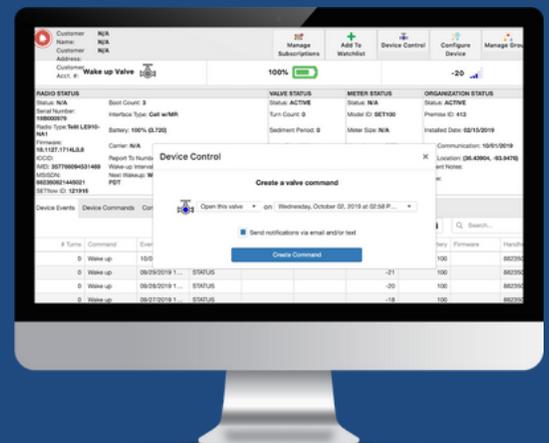
The SET 100C Remote Smart Valve provides water utilities with a low-cost, secure way of managing customer disconnects and reconnects without an on-site visit. This lowers utility operational costs, reduces on-site worker safety concerns, and improves revenue stability by decreasing unauthorized water consumption and providing an effective means for revenue collection. SET is the only technology provider in the water utility industry to offer a meter-neutral remote shutoff valve that can be selectively deployed at remote or high-turnover accounts.

SMART VALVE FEATURES

- Sizes ranging from 1/2 inch up to 2 inches to meet a variety of residential, commercial, and industrial applications. Only adds 2" to standard lay lengths.
- Valve positions include open, closed and reduced flow and may be controlled remotely from the SET Meter Data Management System (MDMS).
- The 100C valve contains internal endpoints, and has full capability for meter reading and data transmission, eliminating the need for a discreet endpoint.
- Durable chrome plated ball valve shutoff system.
- The 100C Smart Valve is meter-neutral and can be utilized with multiple meter brands.



The meter neutral SET 100C Remote Smart can be retrofitted to existing meters or installed with new meters. For example, when coupled with the 5" Diehl Hydrus Ultrasonic Meter, the lay length equals the 7.5" standard meter box lay length.



SET MDMS 100C Smart Valve Control Screen
Designed for more than just on/off, the valve control in the SET MDMS is designed to facilitate customer engagement via multiple communication methods regarding unpaid bills, etc.

UTILITY BENEFITS

In addition to freeing field staff time and driving down operational costs, remote controlled shutoff valves create the opportunity to offer pre-paid water services that automatically shut off when a customer has used up their allocation of purchased water.

This allows for increased flexibility on how customers purchase water services, helps manage unauthorized use in areas of frequent turnover (college towns for example), and allows utility staff to focus on more urgent, higher priority maintenance activities.

-  **Decrease unauthorized consumption**
-  **Lower Costs/Increased Efficiency: Less truck rolls**
-  **Increased Control: Open, closed, and partial flow**
-  **Value: Valve contains internal cellular endpoint**
-  **Versatile: Valve is meter-neutral**

CUSTOMER BENEFITS

End users can remotely schedule water service shutoff when they will be traveling or on vacation. This avoids unauthorized water use or accidental leaks when no one is available to monitor usage. Alternatively, customers can remotely enable water services for winter vacation homes to avoid pipe freezing or automatically shutoff water if pipes inadvertently burst.

This not only helps protect property from costly water damage, but it also increases customer satisfaction of their water services. In the event of a shutoff due to delinquent payment, customers can have service quickly reinstated after making their account current. Customers may also receive a text communication notifying them that water service is slated to resume and to turn off any open faucets or valves in their homes to avoid flooding events.

TECHNICAL SPECIFICATIONS

Communication Type	Standard includes Low Power Wide Area Network (LPWAN) two-way LTE-M Cellular, Wifi, and Bluetooth 5.0.		
Firmware Updates	All endpoints are updated over the air (OTA) from the SET MDMS by the SET team and require no action on the part of the utility.		
Data Security	Remote smart valve transmissions are encrypted using AES 256.		
Data Logging	Valves contain an internal endpoint that stores 30 days of hourly meter reads with a first in/first out data management strategy.		
Dimensions	5.5 in. (H), 1.75 in. top diameter, 2.75 in. bottom diameter		
Valve Operations	Valve positions include open, closed, and reduced flow (<1 gpm) and may be controlled remotely through the SET MDMS.		
Operating Temperature	-20° to 60° C / -40° to 140°F		
Battery	Non-replaceable D-Cell Lithium thionyl chloride		
Battery Monitor	Remaining battery life is expressed as a percentage of total remaining battery life within the SET MDMS.		
LTE Cellular Network Providers	US Territories - AT&T/T-Mobile	Bahamas – Aliv / BTC Providenciales – Digicel	Mexico – Claro UAE - Orange

License Requirements: All SET Remote Smart Valves comply with Part 15, Part 22, Part 24, and Part 27 of the FCC Rules. No license is required by the utility to operate the SET endpoints or management system.

Smart Earth Technologies - The Future of Water Utility Management
2810 Caribou Ct., Ste. 140, Carlsbad, CA 92010
877.515.7627 | www.smartearthtechnologies.com | info@setflow.com