Tripleplus WASENS™ Actuator and Water Flow Sensor Installer Guide

Welcome

Thank you for choosing Tripleplus CBM Shutoff Actuator.

Tripleplus CBM (Cloud Building Management) products family is the ultimate Water Management as well Leak Damage Prevention cloud-based solution. The CBM Products family solution is managed via an App and is designed to manage water usage and to prevent damage due to water leak. Tripleplus offers you a total peace of mind when you are in or away. The Controller is the hub of the system. From the 915MHz radio side, it is connecting to all the sensors and other end devices. From the Ethernet connection side, if by Ethernet port or Wi-Fi connection or GSM connection, it communicates with the different Mobile and WEB application through the cloud. The controller role is to control and execute the system configuration rules and commands.

The Shutoff Actuator connected to the Controller by the 915 MHz radio and by that the Controller controlled the Shutoff actuator and the actuator updates with statuses.

Please note.

Please read these instructions carefully and follow the system's installation and commissioning steps.
Maintain this document in a safe place for future reference. Contact your authorized installer with any questions.

⚠ **Warning!** This product includes moving parts. Keep your fingers or any other objects away.

⚠ **Warning!** This product was designed for smart water management, prevent water leakage damages and should be used for this purpose only.

Tripleplus CBM system

Tripleplus CLM line of products includes innovative battery-operated (optional power plug) devices which enables the automated control of water valves. This is unified under the "Cloud Building Management" and "Smart Home" umbrella. The Tripleplus CBM Controller serves as a Gateway that ensures a secured communication between the system devices, Tripleplus cloud and App.

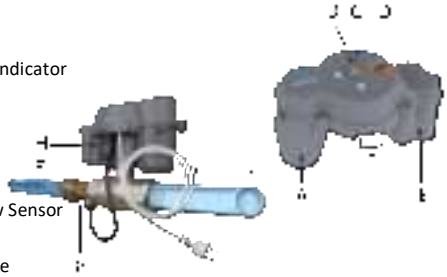
Tripleplus CBM integrates easily into the Cloud Building Management and Smart Home IoT ecosystem, providing a unique cloud-based secured platform for Water management and Leak Management.

Shutoff Actuator and optional Water Flow Sensor and power Plug specification

Product description	The wireless, battery operated water Actuator is mounted on an ISO5211 ball valve installed on the main water line. The water supply automatically shuts off whenever a command leak is detected. Shutoff can also be manually controlled by the user. The Tripleplus CBM Water Flow Sensor is designed to measure the water flow rate. **Abnormal water consumption will not generate automatic shutoff of the Actuator.** The Shutoff Actuator can be purchase with power Plug option, as well.
Dimensions	142 x 73 x 92mm (5.6 x 2.87 x 3.62")
Weight	640gr (22.5 Oz)
Power supply	4 x 3V batteries (CR123A)
Operation voltage	6V
Battery life span	Up to two years based on one operation per day/5 days a week.
Operating RF	902-928 MHz
Transmission range	Open space - up to 230 m (750 ft.) Indoor - up to 120 m (390 ft.) Avoid installing in a metal cabinet.
Certification	FCC ID: 2AFOICBMSHLR5 IC: 20798-CBMSHLR5
IP Rating	IP65
Working temperature	-20^{0}C to +50^{0}C (-4^{0}F to +122^{0}F)
Mounting pad	ISO5211

Actuator with Water Flow Sensor description

A. Shutoff Valve Motor
B. Motor Stem position indicator
C. Led indicator
D. Multipurpose Button
E. Battery Housing
F. Mounting Adapter
G. optional – Water Flow Sensor
I. Anchor Lock
J. optional – Power Cable



- The wireless, battery operated Actuator is installed on any ISO5211 valve using 2 screws (included). It is IP65-rated (dust and water resistant).
- The Actuator and the ISO5211 valve should be installed on the main water line.
- A Fire extinguishing line or a fire sprinkler water line should never be disconnected.
- Ensure easy access to the actuator in case it requires service.
- The unit can be installed perpendicularly or in parallel with the pipe.
- With the utilization of the locking pin, a comfortable actuator disconnection should be possible after installation.
- The Actuator should not be placed inside a metal cabinet.
- Do not immerse the Actuator in water
- For optimal radio performance keep Actuator positioning with the led indicator side up.

Actuator batteries insertion/replacement

1. Loosen the battery cover screw.
2. Remove batteries from the clear plastic wrap and install with the positive end towards the top of the valve as shown.
3. Replace the battery cover and tighten the screw to ensure a waterproof seal.
4. The Actuator will perform a self-test and the motor stem will turn.

Actuator mounting and alignment

1. The factory default status of the Actuator is defined as "OPEN".
2. Shut down the water supply.
3. Install the ISO5211 ball valve and assure it is in an "OPEN" position.
4. Using the provided screws, washers, nuts, install the mounting adapter on the ISO5211 ball valve.
5. Fit the Actuator on the mounting adapter and use the lock pin until it reaches its mechanical limit.

Note - Parallel actuator unit mounting: Use the long mounting adapter when mounting the actuator in parallel

Actuator's alignment reset

The Actuator stem includes a directional indicator. In case that you require to change the Actuator "OPEN" position status default angle, follow the following steps:

1. Unlock the Actuator and pull it out from the valve.
2. Reset the Actuator default alignment position by pressing the Actuator multipurpose button for at least 20 seconds. Wait until the RGB LED light up green for 10 seconds. Default position was successfully changed. Check your App.

2. Once the alignment is default was changed, toggle the Actuator to the "OPEN" position manually by pressing on the multipurpose button for 4 seconds.
3. Install and lock. Check that the App and water flow are properly set.

- **Expected Actuator LED behavior**

  To save the Actuator battery, the LED indicator is not active unless the multipurpose button is momentarily pressed: Short press (less than 1 second) **system status indication mode**. The RGB LED presents the status indication will flash for 15 seconds.

  - GREEN flashes – OK
  - BLUE flashes – communication problems
  - RED flashes – low battery
  - GREEN steady for 10 seconds – Position default reset (see above).

- **System device synchronization and activation**

  Tripleplus CBM family devices are installed and activated using the Tripleplus installers or End-User APP available on AppStore and Google Play. It is recommended to test the unit before installation.

  This Actuator should be installed by an authorized installer.

- **Products options:**

Brand/Item	Type/Model	Short Product description
Shutoff Actuator	CBM-SHAMAP-5-20	Shutoff Actuator without Flow Meter and without power plug
Shutoff Actuator – AC power	CBM-SHAMAP-5-21	Shutoff Actuator without Flow Meter and with power plug
Shutoff Actuator – Flow Meter	CBM-SHAMAP-5-25	Shutoff Actuator with Flow Meter and without power plug
Shutoff Actuator – Full config.	CBM-SHAMAP-5-26	Shutoff Actuator with Flow Meter and with power plug

- **FCC Statements**

  This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
  (1) This device may not cause harmful interference, and
  (2) This device must accept any interference received, including interference that may cause undesired operation.

  Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

  Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  — Reorient or relocate the receiving antenna.
  — Increase the separation between the equipment and receiver.
  — Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  — Consult the dealer or an experienced radio/TV technician for help.

  WARNING – RF EXPOSURE COMPLIANCE: This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

-This Class B digital apparatus complies with Canadian ICES-003.
-Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

- **IC Statements**

  This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
  (1) This device may not cause interference.
  (2) This device must accept any interference, including interference that may cause undesired operation of the device.

  L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
  1) L'appareil ne doit pas produire de brouillage;
  2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

  AVERTISSEMENT – CONFORMITÉ AUX NORMES D'EXPOSITION AUX RF : Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.