

IoT Valve Actuator

VC301-W/VC311-W



Timing Control



Flow Control



Remote Control



IP Rating: IP65

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Product Overview



With the rapid development of microelectronics and computer technology, providing technical guarantee for the intelligentization of electric valves. Gentos has newly researched and developed a cloud-controlled IoT valve actuator VC301-W/VC311-W, which is an innovative product in the field of electric valve intelligence.

The products come with WIFI communication, users or customers can control the valve by mobile APP, which is great convenience for them to manage the water system.

Product Features

- Remote control by mobile APP
- WiFi communication
- IP Rating: IP65
- Timing control
- The valve can be adjusted 0-100% opening to control the flow rate

Applications

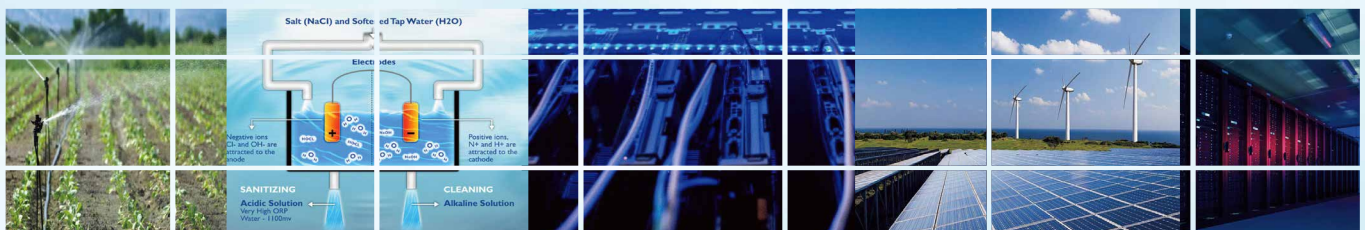
Farm Irrigation: Farm and gardening irrigation system flow control.

Household Water Management: Automatic garden & vegetable watering system control.

Building Water Management: Remote water & flow control management.

Aquaculture: Control the flow rate to meet various water demands for fish or shrimp.

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Control Modes

1. Valve Opening Control Mode:

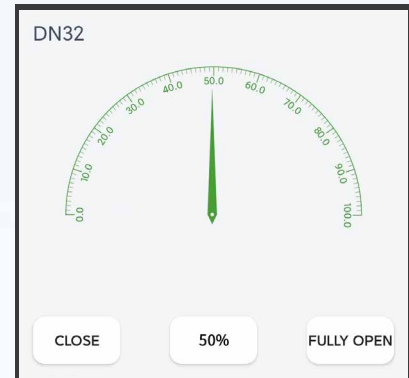
Allows for valve closure (0%), full opening (100%), and percentage adjustment (0%~100%) of the corresponding ball valve. Percentage adjustment provides flexible control over the valve opening.

2. Timer Mode:

When the scheduled time runs out time, the valve will automatically close. When the valve opening time is reached, the valve will open to the corresponding position and remain open. When the valve closing time is reached, the valve will automatically close.

3. Power Failure Mode (VC301-W):

Allows selection of the valve's opening state during a power failure, whether it remains closed, open, or maintains its current state.



Cloud Server

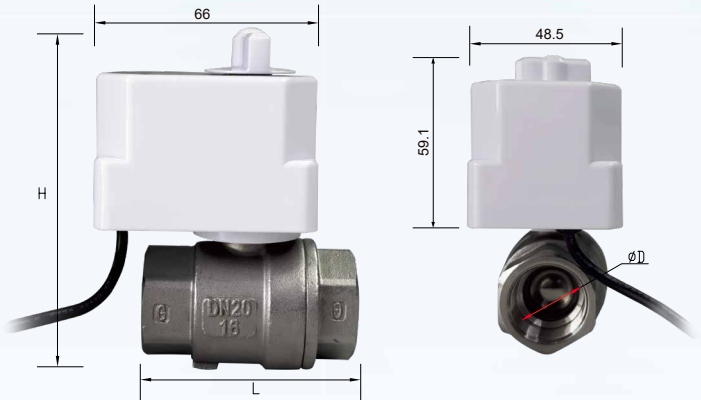
IoT valve actuator use WiFi communication technology to achieve remote monitoring and control by connecting to the Internet through a wireless router. This communication method allows users to conveniently monitor and control via a mobile app. Users can simultaneously monitor and control the status and operations of multiple IoT valve actuators.



Comparison Table

Model	Category	Communication	Functions
VC301-W	VC301 (Standard)	WiFi	Timing, Valve Adjustment, MeterTube APP Control
VC311-W	VC311 (Standard + Power Failure Mode Control)	WiFi	Timing, Valve Adjustment, MeterTube APP Control Power Failure Mode Control

Product Specification (Unit: mm)



*Note: H/L/D refers to valve body materials and caliber specifications, with a tolerance of ±1mm.

Product Model

Format of type selection: IoT Valve Actuator; Model: A-B

Model		Description						
IoT Valve Actuator		Applicable Medium: Water						
		Power Supply Voltage: DC5V						
		Maximum Power: 3W						
		Output Torque: 2Nm						
		IP Rating: IP65						
		Output: WiFi						
		MeterTube: Available						
		Operating Pressure: ≤1.0MPa						
		Controller Operation: Remote control via MeterTube mobile APP						
		Connection Method: 2-Way internal thread G						
	Medium Temperature: ≤100°C							
Specifications								
A		Function selection						
1		VC301-W: Timing, Valve Adjustment, MeterTube APP Control						
	2	VC-311-W: Timing, Valve Adjustment, MeterTube APP Control, Power Failure Mode Control						
B		Valve body material and caliber specifications						
		Material	Caliber	Interface Type	D	L	H (301)	H (311)
1	Stainless Steel		DN15	2-Way internal thread G1/2	G1/2"	63	86	98
			DN20	2-Way internal thread G3/4	G3/4"	66	93	105
			DN25	2-Way internal thread G1	G1"	89	103	115
2	Copper		DN15	2-Way internal thread G1/2	G1/2"	60	89	101
			DN20	2-Way internal thread G3/4	G3/4"	67	95	107
			DN25	2-Way internal thread G1	G1"	74	102	114
			DN32	2-Way internal thread G1 ^{1/4}	G1 ^{1/4} "	86	110	122

Selection Sample: IoT Valve Actuator, Specification: 1-1-DN15
Description: Model VC301-W with Timing, Valve Adjustment, MeterTube APP Control, Stainless Steel Pipe, for Caliber Size DN15.