



**Make It Easy**



**JOYS663**  
Ultrasonic Water Meter

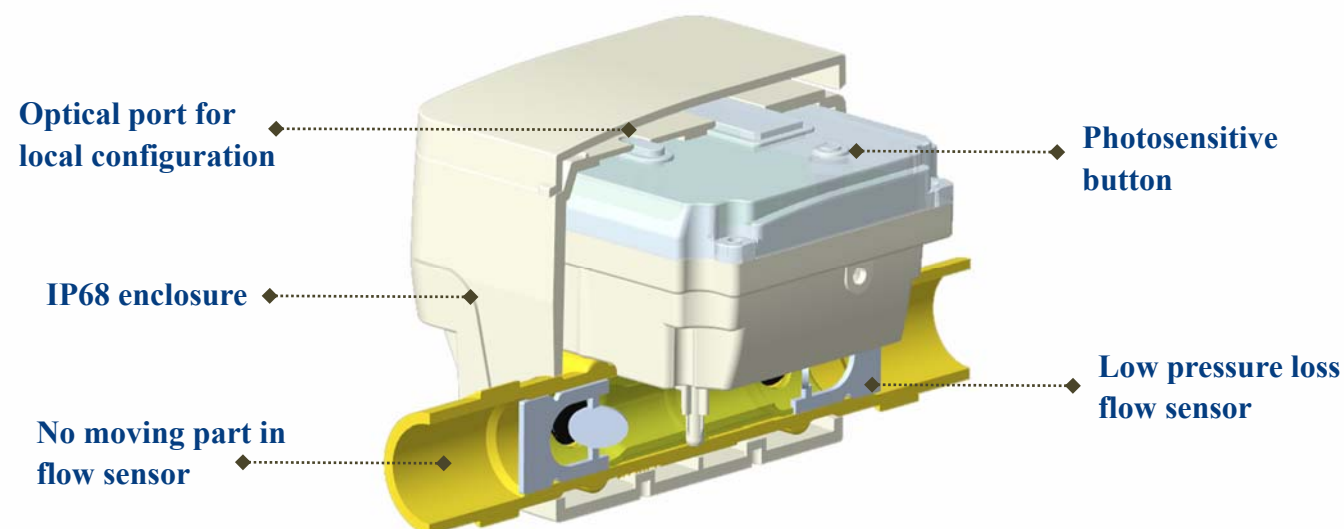
## DESCRIPTION

JOYS663 is an ultrasonic water meter that combines Joy's decade's experience in ultrasonic metering research and development. By updating the button from rubber to photosensitive type, the button life is extended as long as the meter life and the meter water protection is pretty reliable as IP68. In addition, the improved special compact design also makes more battery types are now available to choose. It does completely assure the quality of meter working life for different fields.

By developing a bunch of communication ports for the coming IoT age, M-Bus, LoRa and NB-IoT are ready for using in different aims such as data collecting and labor cost down.

## FEATURES

- ▶ High measuring accuracy, R160/R250
- ▶ Low starting flow in 3L/h
- ▶ Updated data storage
- ▶ Easy installation, Horizontal or vertical
- ▶ Fully water-proof IP68
- ▶ Automatic events recording and reporting
- ▶ Reverse counting
- ▶ Leakage detection
- ▶ Temperature detection
- ▶ Anti-freezing
- ▶ Real-time anomaly monitoring
- ▶ Anti-magnetic protection and records



## TECHNICAL SPECIFICATIONS

Item	Parameter			
	DN15		DN20	
<b>Diameter, mm</b>				
<b>R(Q3/Q1)</b>	R160	R250	R160	R250
<b>Q3, m<sup>3</sup>/h</b>	2.5	2.5	4	4
<b>Q4, m<sup>3</sup>/h</b>	3.125	3.125	5	5
<b>Q1, m<sup>3</sup>/h</b>	0.016	0.010	0.025	0.016
<b>Connection</b>	G <sup>3</sup> / <sub>4</sub> B		G1B	
<b>Length, mm</b>	165		190	
<b>Width, mm</b>	94			
<b>Height, mm</b>	86			
<b>Connection</b>	Threaded joint			
<b>Temp. Class</b>	T30,T50			
<b>Class of Pressure Loss, kPa</b>	ΔP63			
<b>Sensitivity to Irregularity</b>	U10/D 5			
<b>Max. Working Pressure, MPa</b>	1.6			
<b>Accuracy</b>	Class 2			
<b>Environmental Classification</b>	B			
<b>Electromagnetic Environment</b>	E1			
<b>Start Flow Rate</b>	3L/h (R250)/5 L/h(R160)			
<b>Installation Direction</b>	Horizontal or Vertical			
<b>Installation Environment</b>	Indoor			
<b>Date Storage</b>	36 months historical records			
<b>LCD</b>	8-digit			
<b>LCD Resolution</b>	0.001 m <sup>3</sup>			
<b>Power Supply</b>	DC 3.6V, battery			
<b>Meter Life</b>	6/10 years lifetime			
<b>Communication Interface</b>	IrDA, Pulse output, M-Bus, LoRa, NB-IoT			
<b>Protection</b>	IP65 / IP68			
<b>Ambient Temp.</b>	5~55 °C			
<b>Storage Temp.</b>	-20~60 °C			
<b>Standard Compliance</b>	Meter Standard	EN14154, OIML R49		
	Communication Standard	EN13757, CJ/T 188		