



**Make It Easy**



**JOYS500D**

**MEC Water Meter**

## DESCRIPTION

Joy's new generation MEC (Mechanical to Electronic Converter) remote reading water meter adopt advanced non-magnetic sensor technology. By adding a clip-on communication module on a traditional mechanical water meter which assembled with a non-magnetic steel disc, it makes very easy for installation, modification, updating and various parameter configurations in different occasions.

JOYS500-MEC supports multi-communication ports, such as M-Bus and LPWAN (LoRa, NB-IoT), for user collecting and updating data in field by using JOY SaaS platform. Via the combination of advanced data collection and management system, Joy can help to achieve a better application of meter data for water utilities, and use for various support which can make water supply and billing more efficient.

## FEATURES

- ▶ Battery powered with a lifetime up to 4 years
- ▶ Signal acquisition accuracy low to 1L
- ▶ Protection up to IP68
- ▶ Automatic events recording and reporting
- ▶ Optional meter body material
- ▶ Anti-magnetic protection and records
- ▶ Optical communication available
- ▶ Real-time anomaly monitoring

Diameter (mm)	Length (mm)	Flange Diameter(mm)	Center diameter of Bolt hole(mm)	Bolt holes per flange	Diameter of Bolt hole
DN32	230	GB 1 1/2"	N/A	N/A	N/A
DN40	245	GB 2"	N/A	N/A	N/A
DN50	200	165	125	4	Φ19
DN65	200	185	145	4	Φ19
DN80	225	200	160	8	Φ19
DN100	250	220	180	8	Φ19
DN125	250	210	250	8	Φ19
DN150	300	285	240	8	Φ23
DN200	350	340	295	12	Φ23
DN250	450	405	355	12	Φ28
DN300	500	460	410	12	Φ28

## TECHNICAL SPECIFICATIONS

Diameter, mm	R(Q3/Q1)	Q1	Q2	Q3	Q4
DN32	100	0.1	0.16	10	12.5
DN40	100	0.16	0.256	16	20
DN50	200	0.315	0.504	63	78.75
DN65	200	0.315	0.504	63	78.75
DN80	200	0.5	0.8	100	125
DN100	200	0.8	1.28	160	200
DN125	200	0.8	1.28	160	200
DN150	200	2	3.2	400	500
DN200	200	3.15	5.04	630	787.5
DN250	200	3.15	5.04	630	787.5
DN300	200	5	8	1000	1250
<b>Max Reading</b>	DN32-DN40: 99999.9999m3; DN50-125: 999999.999m3; DN150-300: 9999999.99m3				
<b>Pulse Equivalent</b>	DN32-DN40: 1L; DN50-125: 10L; DN150-300: 100L				
<b>Flow Sensor Material</b>	Cast Iron				
<b>Temp. Class</b>	T30				
<b>Pressure Loss</b>	ΔP63				
<b>Sensitivity to Irregularity</b>	U10/D 5				
<b>Max. Working Pressure, MPa</b>	1.0				
<b>Installation Direction</b>	Horizontal				
<b>Accuracy</b>	Class 2				
<b>Electromagnetic and Environment</b>	E1, C				
<b>Date Storage</b>	36 months				
<b>Power Supply</b>	DC 3.6V Battery, 4+1 years lifetime				
<b>Communication Interface</b>	IrDA, M-Bus, LoRa or NB-IoT				
<b>Protection Class</b>	IP65/IP68				
<b>Ambient Temp.</b>	5~55 °C				
<b>Storage Temp.</b>	-20~60 °C				
<b>Communication</b>	LoRa	470MHz and other ISM band(Customized)			
	NB-IoT	B5 (others customized)			
<b>Standard</b>	Meter Standard	ISO4064, OIML R49, EN14154			
	Communication Standard	CJ/T188			