

INTELLIGENT BULK WATER METERING

WS Series Wired Remote-Reading Bulk Water Meter

Accurate flow measurement, remote data transmission and dependable monitoring for commercial, municipal and industrial water networks.



SIZE RANGE DN40-DN200	RANGE RATIOS R50 / R200	WIRED COMMS M-Bus / RS-485	DISTANCE Up to 1,200 m
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SYSTEM OVERVIEW

Non-magnetic sensing removes susceptibility to external magnetic-field interference and magnetic tampering. Multi-point calibration, scheduled consumption snapshots and integrated historical storage support reliable monitoring and efficient network management.

KEY FEATURES

- Wired remote reading through M-Bus or RS-485
- High-accuracy measurement across an extended flow range
- R50 and R200 metrological configurations
- Non-magnetic signal acquisition
- Resistant to magnetic interference and tampering
- Multi-segment calibration
- Scheduled data freezing and historical-record upload
- Integrated low-voltage alarm
- High-contrast LCD consumption display
- Ultra-low-power metering design
- Epoxy-encapsulated electronic module for wet chambers
- Horizontal or vertical installation

TYPICAL APPLICATIONS

- Municipal water-distribution networks
- Commercial and industrial water monitoring
- District and zone metering
- Building and residential-complex water management
- Irrigation and agricultural water systems
- Remote utility metering and data-acquisition networks

CORE CAPABILITIES

Remote reading: M-Bus or RS-485
Protocols: DL/T 645, CJ/T 188, Modbus
Display: High-definition LCD
Installation: Horizontal or vertical
Data: Scheduled freeze and historical upload
Alarm: Integrated low-voltage warning

NETWORK INTELLIGENCE

01 · SECURE SENSING

Non-Magnetic Acquisition

Maintains dependable meter reading in the presence of strong magnetic fields and discourages magnetic tampering.

02 · DATA MANAGEMENT

Historical Consumption

Scheduled consumption snapshots, local history and remote record upload support network analysis and billing workflows.

03 · FIELD FLEXIBILITY

Utility-Ready Integration

Long-distance wired communication, multiple protocols and horizontal or vertical mounting simplify deployment.

Metrological Parameters

Legacy flow-rate designations. All flow values are expressed in m³/h.

MODEL	DN	R	Qp PERMANENT	Qs OVERLOAD	Qt TRANSITIONAL	Qm MINIMUM	MINIMUM INDICATION	MAXIMUM INDICATION
WS-40	40 mm	50	40	50	1.28	0.80	0.0001 m³	999,999 m³
WS-40	40 mm	200	40	50	1.25	0.20	0.0001 m³	999,999 m³
WS-50	50 mm	50	40	50	1.28	0.80	0.0001 m³	999,999 m³
WS-50	50 mm	200	40	50	1.25	0.20	0.0001 m³	999,999 m³
WS-80	80 mm	50	63	80	2.00	1.26	0.0001 m³	999,999 m³
WS-80	80 mm	200	63	80	2.00	0.32	0.0001 m³	999,999 m³
WS-100	100 mm	50	100	125	3.20	2.00	0.0001 m³	999,999 m³
WS-100	100 mm	200	100	125	3.12	0.50	0.0001 m³	999,999 m³
WS-150	150 mm	50	250	312	8.00	5.00	0.0001 m³	999,999 m³
WS-150	150 mm	200	250	312	7.88	1.25	0.0001 m³	999,999 m³
WS-200	200 mm	50	400	500	12.80	8.00	0.0001 m³	999,999 m³
WS-200	200 mm	200	400	500	12.50	2.50	0.0001 m³	999,999 m³

Electrical and Communication Specifications

M-Bus operating voltage	DC 24-42 V
RS-485 operating voltage	DC 6-15 V
Operating current	≤20 mA
Communication-module quiescent current	≤1.3 mA
Metering-electronics static consumption	<10 µA
Maximum transmission distance	Up to 1,200 m
Communication rate	1,200-9,600 bps
Supported protocols	DL/T 645, CJ/T 188 and Modbus
Operating temperature	0 °C to +60 °C
Relative humidity	≤95% RH
Battery design life	More than 8 years under standard operating conditions
Display	High-definition LCD
Installation orientation	Horizontal or vertical

Qm minimum flow · Qt transitional flow · Qp permanent flow · Qs overload flow · R measuring range ratio Qp/Qm.