

aquastream®

Modular system
for mechanical water meters



Technical Datasheet

APPLICATION

Modular system with inductive sensor for retrofitting aquabasic® PMK cold-water meters and TOPAS PMW-basic hot water meters. The modular system technology provides a single, easy access to smart meters and protects the investment made on an already installed meter park.

CHARACTERISTICS

- › Available in Radio (AQS-W8), M-Bus (AQS-MB) or M-Bus/Pulses (AQS-MBOC) version
- › In combination with aquabasic® PMK cold-water meters and TOPAS PMW-basic hot water meters.
- › Protection class IP 68
- › Local programming with NFC interface
- › Battery-powered for up to 16 years of operation

1. Product variants

aquastream® Radio (AQS-W8)	Module with wireless radio communication interface
aquastream® M-Bus (AQS-MB)	Module with 2-wire M-Bus protocol output.
aquastream® M-Bus/Pulses (AQS-MBOC)	Module with simultaneous 2-wire M-Bus protocol output and a configurable 2 or 3-wire pulse output.

2. Technical data

Resolution	1 liter
Power Supply	Integrated lithium 3,6V battery
Battery lifetime	Up to 16 years

3. Environmental conditions

Fluid	Water
Protection class	IP 68
Operating temperature	0°C to +55°C
Storage temperature	-20°C to +70°C
Humidity	Up to 98% relative humidity, with condensation

4. Communication Interface – AQS-W8 | Radio

Protocol	WM-Bus conformed EN 13757-4 , OMS 4.0
Frequency	868 MHz (T1 Mode)
Emission Interval	Every 16 seconds
Meter index	00000,000 m3 Configurable value during installation

Information WM-Bus <i>Long frame</i>	Current main index Return water volume Historical volume (end of month) Date volume History (end of month) Date/Time Status info Battery life Long telegram when the module is installed on the meter
Information WM-Bus <i>Short frame</i>	Status info Battery life Reduced telegram when the module is not installed on the meter
Addresses	OMS compliant address Manufacturer: IMT Version: 0x05 / 0x01 Serial number: 8-digit

5. Communication Interface - AQS-MB | M-Bus

Protocol	M-Bus conformed EN 13757-2/3
Baud rate	300, 2400, 9600
Cable	Integrated with gel connector, 2 non-polarized wires, length 25cm
M-Bus load	1,5 mA
Meter Index	00000,000 m3 Configurable value during installation
Information M-Bus Frame (REQ_UD2)	Current main index Return water volume Current flow rate Maximum flow rate Date/Time Module manufacturing number Factory number of the water meter Firmware Version Hardware Version Status Info Battery life
Addresses	Primary Address 0-250 Secondary Address 8-digits Extended Secondary Address with serial number

6. Communication Interface - AQS-MBOC | M-Bus/Pulses

Pulses output	Open Collector, 2 or 3 wires configurable
Modes	Different modes configurable 2 wires with compensation, 3 wires with direction (PULSE / DIR / GND) 3 wires (PULSE+ / PULSE- / GND) 3 wires for duplicate signal (PULSE1 / PULSE2 / GND)
Cable	3 wires configurable, 1,5m length
Backflow detection	Yes
Pulse Weight	Configurable (1, 2.5, 10, 100, 1000 litres...)
Pulse Duration	Configurable (30ms, 50ms, 100ms, 500ms, 1s...)
M-Bus Output	M-Bus conformed EN 13757-2/3
Baud-rate	300, 2400, 9600
Cable	2 non-polarized wires, length 1.5m
M-Bus Load	1,5 mA
Meter Index	00000,000 m3 Configurable value during installation
Information M-Bus	Current main index

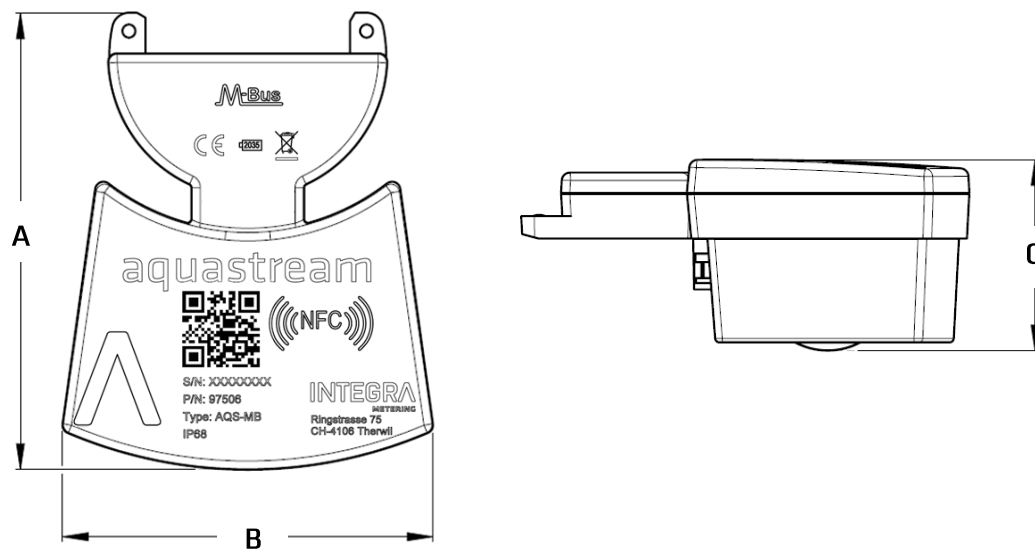
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6. Programming

Interface	NFC - 13,56 MHz
Alarms	Manipulation/wrong installation, Overload, Leakage, Low Battery, Backflow, Burst
Programming Software	ParamApp, compatible with Android > 6.1 – Available on Google Play

7. Dimensions

Dimensions	A = 108 mm B = 89 mm C = 46 mm
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