

Contatore dell'acqua elettronico per la misura della portata di acqua fredda o calda, con accumulo e trasmissione delle letture tramite rete LORAWAN. Sigillo antimagnetico elettronico e display digitale.



Applicazioni tipiche:

- Edificio intelligente
- Industrie intelligenti
- Agricoltura intelligente

Questo contatore dell'acqua, da 15 mm o 20 mm di diametro, è disponibile per acqua fredda o calda. Consente la misurazione del consumo di acqua ad intervalli regolari e la trasmissione dei dati tramite la rete dati LORAWAN (pubblica o privata). Viene fornito con un display digitale e offre una protezione elettronica contro le frodi elettromagnetiche.

Il contatore dell'acqua consente di leggere e inviare dati a frequenze diverse. È possibile memorizzare localmente fino a 200 misure di consumo.

MEASURES	
Water Volume	Fraud Alert
Time	Temperature
	Battery

INPUTS / OUTPUTS	
Operating water pressure	Fino a 1MPa
Display	Electronic
Internal Memory	200 undelivered messages
Fraud Detection	Electronic antimagnetic seal

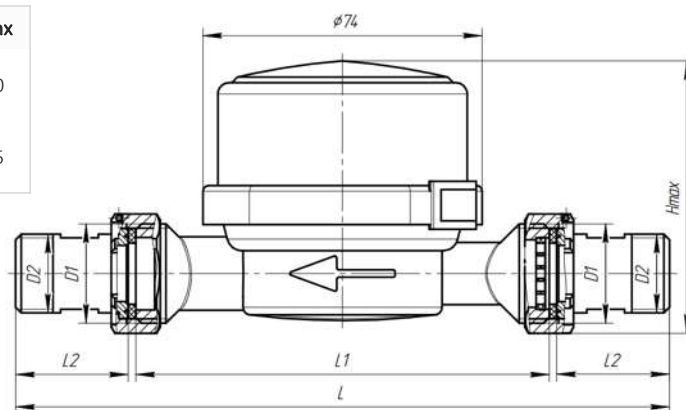
CONFIGURATIONS	
Methods	Infrared (Optoport), LORAWAN Downlink
LORAWAN Configurations	Frequencies 16 Channels frequency plan Confirmed Uplink msgs ADR – Adaptive Data Rate RX1 Offset Join accept delay Uplink number of transmissions TX power TX Data-rate
Specific Configurations	Data Collection: 1, 6, 12, 24 hours Data Transmission: 1, 6, 12, 24 hours Timezone.

LORAWAN FEATURES	
LORAWAN Class	Class A
	ADR - Adaptive Data Rate
	Confirmed packets Yes/No
	16 LORAWAN Channels
Sensitivity	-138 dBm
Default Transmitter power	25 mW (Configurable)
Maximum Transmission Power	100 mW
Urban Radio Coverage	Up to 5 km
Line of Sight Radio Coverage	Up to 15 km
Activation	OTAA, ABP
LORAWAN Frequencies	EU868, US915, AU923 MHz

TECHNICAL CHARACTERISTICS	
Operating Temperatures	+5 / +50 °C
Antenna	Internal. -138 dBm
Replaceable Battery Pack	3.400 mAh
Battery Life	Up to 10 years.

HOUSING	
Housing Dimensions	172 x 70 x 30 mm
Ingress Protection Rating	IP54. Indoor.
Mounting	15mm, 20mm

Meter model	D1	D2	L	L1	L2	Hmx
SHVE15 – cold water meter	G3/4	G1/2	172	11	30	70
SGVE15 – hot water meter			166	0	27	
SHVE20 – cold water meter	G1	G3/4	208	13	38	75
SGVE20 – hot water meter			192	0	30	



Parameters	SHVE15	SGVE15	SHVE20	SGVE20	Units
Type of meter	Electronic water meter with built in radio-module.				
Accuracy class (MID)	2				
Mechanical class	M2				
Length	110		130		mm
Environmental class	Fulfils OIML R49 class B and O (building/outdoor)				
IP protection class	IP-54				
Flow profile sensitivity class	U0/D0				
Electromagnetic class	E2				
Installation orientation	All installation positions (vertical, horizontal, rising pipe, down pipe)				
Optical output	IR emitter				
Price of one pulse on optical output	0.1				
Nominal diameter DN	15		20		mm
Permanent flowrate Q ₃	1.6		2.5		m³/h
Minimum flowrate Q ₁	H-0.016 V-0.032*	H-0.016 V-0.032*	H-0.025 V-0.05*	H-0.025 V-0.05*	m³/h
Transitional flowrate Q ₂	H-0.0256 V-0.0512*	H-0.0256 V-0.0512*	H-0.04 V-0.08*	H-0.04 V-0.08*	m³/h
Overload flowrate Q ₄	2		3.1		m³/h
Ratio Q ₃ / Q ₁	H-100 V-50*	H-100 V-50*	H-100 V-50*	H-100 V-50*	Q ₃ / Q ₁
Ratio Q2/Q1	1,6				Q2/Q1
Maximum working pressure	1.0/10/MAP10				MPa/bar/MAP
Pressure loss	Δp 63				
Indication range of a water meter	0 - 99999,9999				m³
Scale interval (resolution of the indicating device)	0.0001m3				m³
Meter temperature class	T50	T90	T50	T90	
Ambient temperature	+5...+65				°C
Reverse flow measuring	Not designed to measure reverse flow				
Power supply	Internal non replaceable battery				
Battery voltage	3.6				V
Battery capacity	3400				mAh
Battery type	LiSOCl2				
Battery life	from 7 to 10				years
Communication	LoRaWAN				
LoRaWAN Device Class	A				
RF Tx power	Up to +20				dBm
RF Rx sensitivity	-138				dBm
RF frequency range	864 - 915				MHz
RF antenna type	Embedded PCB antenna				
Communication range (rural)	up to 10				km
Communication range (urban)	up to 5				km
LoRaWAN channels	up to 16				
LoRaWAN regions	EU868, RU868, IN865, AS923, AU915, KR920, US915, KZ865, custom (EU868 based)				
Embedded packet queue depth	200 readings				
Readings collection period	1, 6, 12, 24				hours
Readings transmission period	1, 6, 12, 24				hours

I valori, segnati "*" è dato per installazioni diverse da quelle orizzontali.