VAD DN15 Water Meter with Telemetry

Extended technical datasheet for distributor / OEM / technical approval workflow

Release gate: this package is structurally aligned for EU sales and technical approval, but certificate-controlled values still need to be inserted from the final MID / RED / production drawing set: Q1/Q2/Q3/Q4, R-value and orientation declaration, MID marking year and notified body number, exact RED radio parameters, final dimensions/weight/thread standard and the definitive ordering-code map.

1. Product identification

Commercial name	VAD DN15 Water Meter with Telemetry
Model names visible on supplied artwork	VADTel-WM-15 meter face, VAD-UM-01 telemetry module
Meter type	Mechanical water meter with roller register and remote reading module
Use case	Residential and light-commercial water metering, AMR/AMI
Variants to structure	Cold / hot water, telemetry / non-telemetry, thread and body-length options

2. Product description

Scope	Compact mechanical water meter platform for potable-water metering in household and light-commercial systems, with optional battery-powered telemetry for remote reading and event transfer.
Where used	Residential / apartment / building services / light-commercial utility metering and AMR/AMI deployments.
Positioning	Mechanical base meter with smart communication layer prepared for EU-compliant release.

3. Metering principle and metrological basis

Metering principle	Mechanical. The supplied materials do not support an ultrasonic claim, so the master file is drafted as a mechanical meter platform.
Legacy marking visible on artwork	Qn 1.5 m³/h
Required MID-format declaration for released version	Q1, Q2, Q3, Q4, R-value(s), installation orientation, temperature class, MPE statement and any pressure-loss / disturbance claims if used.
Starting flow	Publish only if validated by certificate / test report.
Legal wording for telemetry	Where applicable, describe the communication module as an additional functionality without metrological impact, consistent with the certified architecture.

4. Environmental and mechanical data

Water temperature marking visible on artwork	+5…+90 °C
Temperature class visible on artwork	T50
Pressure rating visible on artwork	MAP16
Ingress ratings visible on artwork	IP68 on meter face / IP65 on telemetry cover
Ambient temperature range	To be completed from validated design and battery profile.
Storage temperature	To be completed.
Humidity limits	To be completed.
Materials in contact with water	To be completed from wetted-material specification and drinking-water compliance declarations.

5. Power supply

Battery type	CR2450 lithium cell
Nominal voltage	3 V
Battery lifetime claim	Do not publish as a standalone number unless tied to an explicit usage profile.
Lifetime assumptions to disclose	Reading interval, transmission interval, radio profile, network conditions, operating/storage temperature and alarm rate.
Battery replacement policy	Define before release: sealed module / authorized service / factory replacement only.

6. Telemetry / communication

Communication marking on artwork	GSM/GPRS
Band / module details	Insert from final radio module BOM and RED file.
Maximum RF output power	Insert from final RED declaration/test report.
Protocol / data transport	Publish only validated product value.
Meter-reading source	Pulse / reading interface; artwork shows K = 4.440 × 10■■ m³/imp.
Encryption / authentication	Declare only if implemented in released firmware and documented.

7. Display and indications

Display type	Mechanical roller register with m³ indication and fine-resolution indicator.
Primary unit	m³
Fine-resolution marking visible on artwork	x 0.0001
Visible display/face content	Serial/barcode field, CE symbol, M24 symbol on artwork, IP marking, K-factor and operating markings.

8. Logging and alarms

Event types	Define only implemented functions such as tamper, low battery, communication alarm, reverse flow, leak or empty-pipe related indications if supported.
Archive depth	Insert from firmware specification.
Interval archive	Insert from firmware / backend specification.
Legal relevance	State clearly whether archived or transmitted values are legally relevant or informational only in the certified configuration.

9. Installation

Mounting position	Per certified variant; declare any horizontal/vertical restrictions.
Straight-pipe requirement	Declare only if required for claimed performance.
Connection size	DN15
Thread / body length	Insert exact standard and length variant from production drawing.
Dimensions	Insert length / width / height from production drawing.
Weight	Insert from finished-product specification.

10. Compliance and marking

MID basis	Directive 2014/32/EU, Annex III (MI-001) for water meters.
Standards basis	EN ISO 4064 series for water-meter requirements; EN 14154-4:2023 may be referenced for additional functionalities without metrological impact where applicable.
Radio requirement	RED 2014/53/EU applies to radio-equipped variants.
Marking on product	CE marking plus supplementary metrology marking MYY and notified body number according to the approved conformity route.
DoC access	Provide EU Declaration of Conformity by URL and/or QR code in the released version.
Certificate references	Insert final MID certificate number, notified body, RED references and released DoC URL.

11. Manufacturer details

Legal manufacturer	V.A.D. s.r.o.
Registered address	Konventná 6, 81103 Bratislava, Slovakia
Website	www.vadsro.eu
Support contact	inbox@vadsro.eu | +421-910-411-379
Country of manufacture	Made in EU; exact plant/country to be frozen in released version