

Gladiator LR Digital

Positive Displacement Water Meter (Concentric and Inline)

The Gladiator LR Digital is Arad's super sensitive positive displacement LoRaWAN water meter with a fully integrated under the glass radio, providing a vast online data and supports rich alarm options.

When integrated with Arad's MDM platform, the Gladiator LR meter provides a powerful end-to-end water management solution.



Applications

Domestic consumption

Available Sizes

1/2" – 1" (15mm-25mm)

Standards

- MID 2014/32/EU (based on OIML R49 EN 14154 and ISO 4064:2014)
- WRAS

LoRaWAN protocol

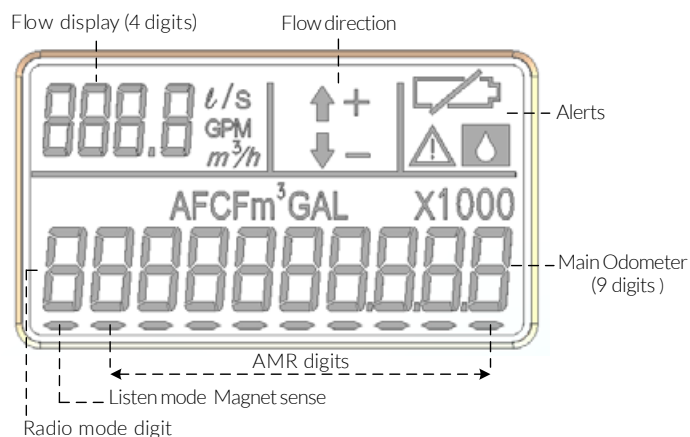
- Class A
- Over the air Activation
- Activation by Personalization

Features

- LoRaWAN certified
- Supported frequency 9xx / 8xx MHz
- Integrated LoRa Radio
- Secured data transfer
- Specially designed for high accuracy and wide measuring range
- Sealed super- dry register

Extra SW Tools

- Field Tech tool



Gladiator LR Digital UK

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Technical Specifications

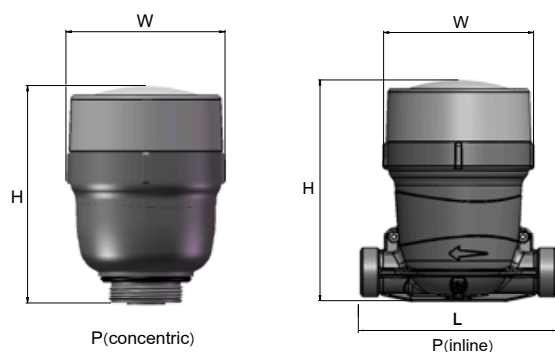
Maximum Working Pressure	16 bar
Maximum Working Temperature	50°C
Meter body material	Highly reinforced composite material
Body	BSP
Inlet / Outlet Threads	3/4" (For pipe line 1/2") 1" (For pipe line 3/4") 1 1/4" (For pipe line 1")
Register	IP68
RF power	up to 30dBm (1W)
Frequency	9xxMHz / 8xxMHz
Modulation	LoRa / FSK

Main supported features

Feature	Description
Alarms	Battery / Leak
Display	Wide and high detailed display
Nonvolatile memory	User data and metering data is secured in nonvolatile memory

Dimensions

Model (concentric)		PD15 (concentric)	PD20 (concentric)	PD15 (inline)	PD20 (inline)	PD25 (inline)
Nominal size	(mm)	15	20	15	20	25
	(inch)	1/2	3/4	1/2	3/4	1
L - Length without couplings (mm)		-	-	110/115/130/134/122/154/ 165/170/190	110/115//134/140/154/ 165/170/190	178/198/260
W - Width (mm)		103	103	98	98	133
H - Height (mm)		157	157	151	151	174
Weight (kg)		0.66	0.66	0.66	0.7	1.325



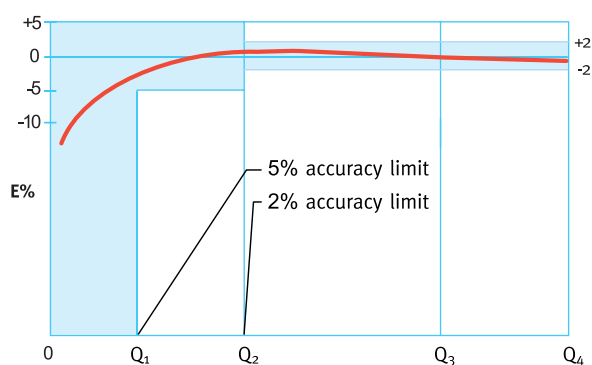
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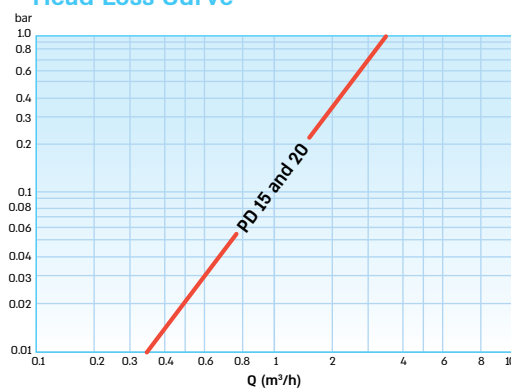
Performance data

Model	Nominal Size (mm)	Q4 Maximum flowrate (m ³ /h)	Q3 Nominal flowrate (m ³ /h)	Q2 Transitional flowrate (l/h)	Q1 Minimum flowrate (l/h)	R Q3/Q1	Δp at Q3 (ISO class)	Maximum register capacity (m ³)	Minimum register capacity (l)	Sensitivity (l/h)
PD 15 and 20 (concentric)	15 or 20	2	1.6	8	5	315	16	10 ⁵	0.02	1
PD 15 and 20 (concentric)	15 or 20	3.125	2.5	10	6.25	400	40	10 ⁵	0.02	1
				12.80	8	315				
PD 15 (inline)	15	2	1.6	8	5	315	16	10 ⁵	0.02	1
	15	3.125	2.5	10	6.25	400	63			
PD 20 (inline)	20	5.0	4.0	25.6	16.0	250	63	10 ⁵	0.02	2
PD 25 (inline)	25	7.8	6.3	32	20	315	63	10 ⁵	0.02	6

Accuracy Curve



Head Loss Curve



Installation

- The meter can be installed in any position (horizontal, vertical, or inclined)
- See separate Installation Instructions for full details.