For More Detailed Product Information, Please Contact:
Viewshine Ltd.
Building 6, No.1418-41 Moganshan Road, Hangzhou, China
Tel: +86-571-88179018
Fax: +86-571-88179012
Email: sales@viewshine.com.cn
www.viewshine.cn

Viewshine Ultrasonic Products

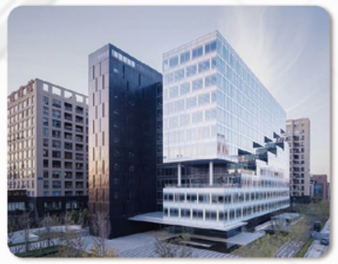
Smart Ultrasonic Gas Meter

VIEWSHINE

About Viewshine

Viewshine is a leading high-tech company that specializes in the research and development, manufacturing, and global sales of ultrasonic gas and water meters. We also provide intelligent gas/water information system platforms and terminals. With a history dating back to 1997 and listed in 2017 (Stock Code: 002849), we are at the forefront of meter manufacturing in China, with more than 20 years of pioneering experience in ultrasonic technology.

Our products are widely used and trusted by major gas and water companies worldwide, with whom we have established strong partnerships. Our commitment to excellence and innovation has made us a trusted leader in the industry.



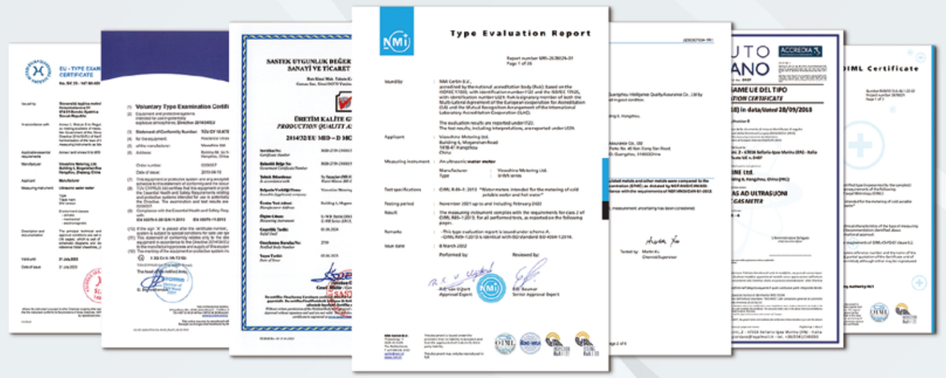
Headquarters Building
Covering an Area of 21045㎡

Gas Meter and Electronic Parts
Production Base
Coveringan Area of 25133㎡

Water Meter Production Base
Covering an Area of 6000㎡

Viewshine stands as a trailblazer in the smart ultrasonic gas/water meter industry, having obtained several key international product certifications and hundreds of product patents:

International Certifications



Viewshine products boast an array of prestigious international certifications, including MID B+D Certifications, ATEX Certification, and more.

Intellectual Property

At Viewshine, we pride ourselves on technological innovation with over 240 intellectual property rights spanning product design, electronic measurement technology, wireless communication technology, software systems and various other cutting-edge fields.

➤ Why Choose Us

- Rich Industry Experience
- State-of-the-Art Manufacturing Facilities
- Strict Quality Control
- Expert Team
- Extensive International Certifications
- OEM and ODM
- Exceptional Customer Support
- Competitive Pricing

➤ Superiorities of Ultrasonic Products

- Accurate and Stable Metering
- High Sensitivity with Low Starting Flow Rate Detection
- High Reliability and Wide Measurement Range
- Low Pressure Loss for Efficient Flow
- Long Service Life (8-10+ years)
- Anti-reverse Flow and Anti-overflow Feature
- Data Freezing, Storage, and Abnormal Alarms
- Compact Design for Space-limited Installations
- Multiple Communication Methods for Intelligent Management

Product Service Chain

APPLICATION SOFTWARE

DATA TRANSMISSION

DATA COLLECTORS

CONVERTERS

METERS

EMRC/Platform Optional

TCP/IP

TCP/IP

LAN

Gateway

WIFI/4G/3G

APP

LAN

Data Collector

IC Card

RP Repeter

Bluetooth

GSM Internet

NB-IoT Platform

Handheld unit

LoRaWAN

GPRS

Pluse Output

U-GR1: Pulse Output Gas Meter

P-GR: Valve Controller

U-GR3: LoRaWAN Gas Meter

U-GR: GPRS Gas Meter

U-GR2: GPRS Gas Meter

U-GR3: GPRS Gas Meter

U-VC: Valve Controller

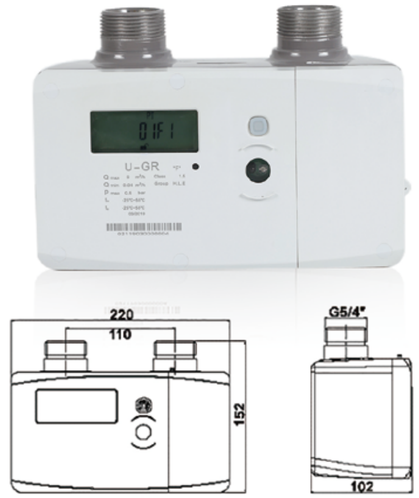
U-GR: NB-IoT Gas Meter

U-GR4: NB-IoT Gas Meter

D-GR-M1: External Module

➤ Overview for U-GR

Viewshine U-GR is an ultrasonic smart gas meter with a replaceable wireless communication module, internal shutoff valve, and MID Certification. It offers a super extended measuring range of 0.016 - 10m³/h, ensuring high accuracy with its sensitive ultrasonic sensor. The meter's full-electronic design, temperature, and pressure compensation, combined with no mechanical moving parts, make it the optimal choice for efficient meter management.



Parameters	Unit	G1.6	G2.5	G4.0	G6.0
Nominal Measured Flow Q_{nom}	m³/h	1.6	2.5	1.6/2.5/4.0	6.0
Maximum Measured Flow Q_{max}	m³/h	1.6	4.0	6.0	10.0
MinimumMeasured Flow Q_{min}	m³/h	0.016	0.025	0.040	0.060
Lowest Flow Rate Q_{start}	m³/h	0.004			
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	50			
Pressure Loss at Q_{max}	Pa	⩽200			
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-30 to 70			
Humidity	%	⩽95%			
Power Supply	Li Battery	15 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	G11/4 (ISO228)			
Distance Between Inlet and Outlet	mm	110			
Protection Level	Class	IP66			
Overall Dimensions	mm	220*102*152			
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		NB-IoT / GPRS / LoRaWAN...			
Material of Meter Body		Die-casting Aluminum			

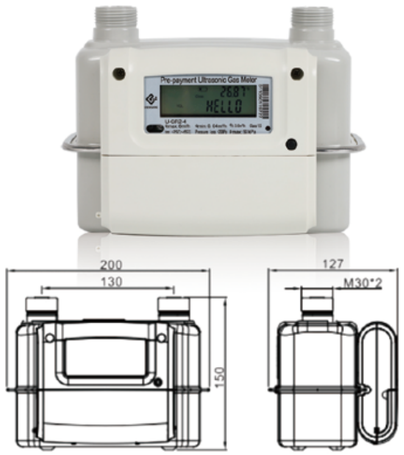
➤ Overview for U-GR1

Viewshine U-GR1 is a compact ultrasonic gas meter designed for installation in narrow or concentrated spaces within meter boxes. With an extended measuring range of 0.016~10m³/h, U-GR1 maintains a high level of accuracy thanks to its sensitive ultrasonic sensor. No moving parts, full electronic measurement, and temperature compensation contribute to superior accuracy and stability throughout its service life.

Parameters	Unit	G1.6	G2.5	G4.0	G6.0
Nominal Measured Flow Q_{nom}	m³/h	1.6	2.5	4.0	6.0
Maximum Measured Flow Q_{max}	m³/h	2.5	4.0	6.0	10.0
MinimumMeasured Flow Q_{min}	m³/h	0.016	0.025	0.040	0.060
Lowest Flow Rate Q_{start}	m³/h	0.004			
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	⩽10			
Pressure Loss at Q_{max}	Pa	⩽200			
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-30 to 60			
Power Supply	Li Battery	10 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	G3/4”, G1”			
Protection Level	Class	IP54			
Overall Dimensions	mm	199*83.5*81.6			
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		Pulse Output			
Material of Meter Body		Steel			

Overview for U-GR2

Viewshine U-GR2 as a smart ultrasonic gas meter equipped with diverse communication modules and an internal shutoff valve. Additionally, its compatibility with various power supply styles provides customers with flexible configuration options at economical principle. The meter's no-moving parts, full electronic measurement, and temperature compensation attributes ensure exceptional accuracy and stability throughout its entire service life.



Parameters	Unit	G1.6	G2.5	G4.0	G4.0+
Nominal Measured Flow Q_{nom}	m^3/h	1.6	2.5	4.0	1.6/2.5/4.0
Maximum Measured Flow Q_{max}	m^3/h	2.5	4.0	6.0	6.0
MinimumMeasured Flow Q_{min}	m^3/h	0.016	0.025	0.040	0.016
Lowest Flow Rate Q_{start}	m^3/h	0.004			
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	⩽10			
Pressure Loss at Q_{max}	Pa	⩽200			
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-30 to 60			
Humidity	%	⩽95%			
Power Supply	Li Battery	10 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	M30*2			
Distance Between Inlet and Outlet	mm	130			
Protection Level	Class	IP54			
Overall Dimensions	mm	220*102*152			
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		NB-IoT / GPRS / IC-Card /...			
Material of Meter Body		Steel			

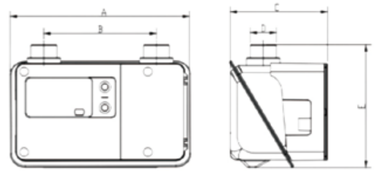
Overview for U-GR3

Viewshine U-GR3 is a smart compact ultrasonic gas meter which is suitable for installation in narrow space and has internal valve with GPRS/LoRaWAN communication. In its extended measuring range of 0.016~10m^3h, U-GR3 keeps high level of accuracy due to its very sensitive ultrasonic sensor. Full electronic measurement and temperature compensation drive all combine to give superior accuracy and stability in meter's service life.

Parameters	Unit	G1.6	G2.5	G4.0	G6.0
Nominal Measured Flow Q_{nom}	m^3/h	1.6	2.5	4.0	6.0
Maximum Measured Flow Q_{max}	m^3/h	2.5	4.0	6.0	10.0
MinimumMeasured Flow Q_{min}	m^3/h	0.016	0.025	0.040	0.060
Lowest Flow Rate Q_{start}	m^3/h	0.004			
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	15			
Pressure Loss at Q_{max}	Pa	⩽200		⩽250	
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-30 to 60			
Power Supply	Li Battery	10 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	G3/4", G1"			
Humidity	%	⩽95%			
Protection Level	Class	IP65			
Overall Dimensions	mm	236*97.4*95			
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		GPRS / LoRaWAN			
Material of Meter Body		Steel			

➤ Overview for U-GR4

Viewshine U-GR4 is a cutting-edge intelligent ultrasonic gas meter equipped with NB-IoT wireless communication modules and an integrated shutoff valve. With an extended measuring range from 0.016 to 6m³/h, the U-GR4 boasts remarkable precision thanks to its highly sensitive ultrasonic sensor. No-moving parts, full electronic measurement and temperature compensation drive all combine to give long term stability in this meter service life.



Model	A	B	C	D	E
U-GR4	207	130	113	M30*2	142

Parameters	Unit	G1.6	G2.5	G4.0	G4.0+
Nominal Measured Flow Q_{nom}	m^3/h	1.6	2.5	4.0	1.6/2.5/4.0
Maximum Measured Flow Q_{max}	m^3/h	2.5	4.0	6.0	6.0
MinimumMeasured Flow Q_{min}	m^3/h	0.016	0.025	0.040	0.016
Lowest Flow Rate Q_{start}	m^3/h	0.004			
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	⩽10			
Pressure Loss at Q_{max}	Pa	⩽250			
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-25 to +55			
Humidity	%	⩽95%			
Power Supply	Li Battery	10 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	M30*2			
Distance Between Inlet and Outlet	mm	130			
Protection Level	Class	IP54			
Overall Dimensions	mm	207* 113*142			
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		NB-IoT			
Material of Meter Body		Steel			

➤ Overview for U-GC

Viewshine U-GC is an advanced commercial gas meter utilizing ultrasonic technology for accurate gas volume measurement. Its high reliability, precision, and precise temperature and pressure compensation guarantee accurate readings in various operating conditions. U-GC is designed to seamlessly integrate with intelligent application modules, offering enhanced functionality and adaptability.

	A	B	C	D	M
G6/G10	150	269.3	166	119	G1 1/4"
G16	180	322	196	136	G1 1/2"
G25	180	322	196	136	G2"

Parameters	Unit	G6	G10	G16	G25
Nominal Measured Flow Q_{nom}	m^3/h	6.0	10.0	6.0	25.0
Maximum Measured Flow Q_{max}	m^3/h	10.0	6.0	25.0	40.0
MinimumMeasured Flow Q_{min}	m^3/h	0.06	0.10	0.16	0.25
Lowest Flow Rate Q_{start}	m^3/h	⩽0.010		⩽0.015	
Error - Qmin ⩽ Q < 0,1Qmax - 0,1Qmax ⩽ Q ⩽ Qmax	%	± 3.0 ± 1.5			
Maximum Working Pressure P_{max}	kPa	⩽10			
Pressure Loss at Q_{max}	Pa	⩽250			
Ambient Temperature t_m	°C	-25 to +55			
Storage Temperature	°C	-30 to +70			
Power Supply	Li Battery	10 Years Design Life 10 Years Metrological Battery			
In- and Outlet Pipe Screw	Inch	G1 ¼		G1 ½	G2
Distance Between Inlet and Outlet	mm	150		180	
Protection Level	Class	IP66			
Overall Dimensions	mm	269.8*120.5*162.8		322*135.9*191	
Medium		NG			
Mechanical Environment	Class	M1			
Electronical Environment	Class	E2			
Communication		4G / GPRS / Customized			
Material of Meter Body		Steel			

Overview for U-VC

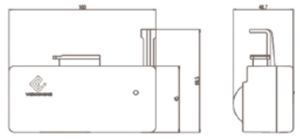
GPRS valve controller (U-VC) is specifically designed to connect with ultrasonic gas meter U-GR1 for remote valve control, data freezing and reading, abnormal event storage and recording, and optical communication functions. The payment model for U-VC valve controller is prepaid on the platform.

Parameters	
Power Supply	Li-battery
Working Temperature	-10℃~55℃
Working Pressure	⩽15kPa
Relative Humidity	⩽95%
Signal Output	Pulse Output, 0.01m³/pulse
Valve Type	Built-out
Battery Life	8 Years

Overview for P-GR

Viewshine IC card prepayment valve controller (P-GR) is used to realize the prepayment function of diaphragm gas meter for gas supply of residential buildings, which is powered by Li-battery and operated by IC cards.

Parameters	
Power Supply	Li-battery
Working Temperature	-25℃~55℃
Working Pressure	⩽10kPa
Relative Humidity	⩽90%
Signal Output	Pulse Output, 0.01m³/pulse
Valve Type	Built-out
Battery Life	10 Years



Overview for D-GR-M1

The Residential Diaphragm Gas Meter Module (D-GR-M1) utilizes NB-IoT communication and functions as an external plug-in module. It is compatible with gas meters equipped with magnetic sensors, allowing mechanical diaphragm gas meters to incorporate intelligent communication capabilities. When used in conjunction with Viewshine's EMRC system, it enables remote meter reading, abnormal event recording, and tamper alarms, leading to significant cost reduction for gas companies and addressing unauthorized meter removal issues.

Parameters	
Power Supply	Li-battery
Working Temperature	-20℃~55℃
Communication	NB-IoT
Smallest Measuring Unit	0.01m³
Protection Level	IP54
Battery Life	10 Years

Communication Method