



# Kaifeng Oasis Instrument Co., Ltd.

## Gas Turbine Flowmeter

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*Professional Flowmeter Manufacturer*

## OILWQ SERIES GAS TURBINE FLOWMETER

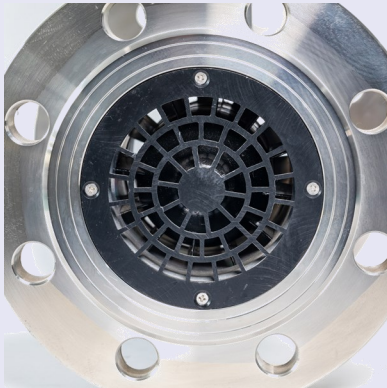
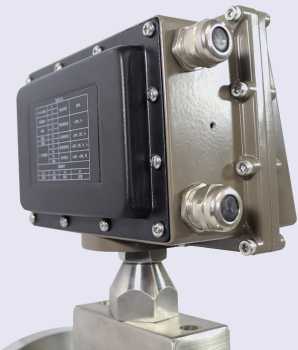
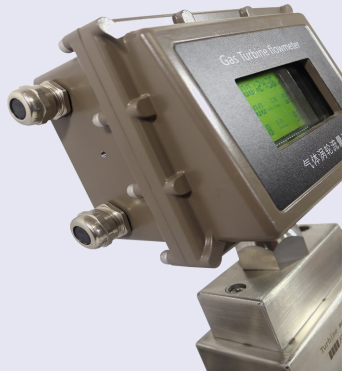
OILWQ Series gas turbine flowmeters offer a reliable and highly accurate solution for measuring the flow rate of gases in a wide range of industrial applications. Utilizing advanced fluid dynamics, the series flowmeters operate by converting the velocity of gas flow into mechanical motion. As the gas passes through the meter, it rotates a precision -engineered turbine. The rotational speed of the turbine is directly proportional to the flow rate, allowing for precise and real-time measurement.

OILWQ series intelligent gas turbine flow meter is self-developed and integrates temperature, pressure, flow sensor and flow totalizer with the advanced flow measuring technology. The optimized designs give the flowmeter excellent low- and high-pressure metering performance, low sensitivity to fluid disturbance. Renowned for their accuracy, repeatability, and fast response times, OILWQ gas turbine flowmeters are essential in industries such as oil and gas, power generation, chemical processing, and HVAC. They are particularly well-suited for applications that demand high precision under varying conditions of pressure and temperature. Additionally, the flowmeters are designed with minimal pressure drop, ensuring efficient energy use without compromising performance.

While robust in performance, and with proper care, the OILWQ meters deliver long-term reliability and precision, making them a trusted choice for critical gas flow measurement.

For industries where performance and precision are paramount, OILWQ gas turbine flowmeters provide a trusted and efficient solution for accurate flow measurement.





### Main Features

- It can detect the temperature, pressure and flow of the measured gas, can automatically track and compensate the flow, and display the cumulative volume of the gas in the standard state (Pb=101.325kPa, Tb=293.15K);
- Wide flow range (Qmin/Qmax=20:1), good repetitiveness, high accuracy (up to 1.0 grade), low pressure loss, low initial flow
- Adopt special integrated rectifier, which has low requirements for the installation of the front and rear straight pipe sections of the flow meter (the front pipe is ≥ 2DN, and the downstream is not required).
- Built-in pressure and temperature sensors, which has high safety performance, compact structure, elegant appearance.
- Self-diagnosed about the faults of pressure and temperature sensor then displays on LCD screen directly.
- A lithium battery can be used continuously for more than five years and has a two-level of battery alarm output function when it under voltage, itis more suitable for using with IC card management systems.
- The intelligent flow totalizer can be positioned at any angle, which makes the reading of the flowmeter more convenient and direct under various installation conditions.
- With multipoint non-linear correction of intelligent instrument coefficient.
- The instrument has RS-485 communication interface, equipped with data management software system has powerful function and rich interface, which can print automatically generated charts.

### Technical Specifications

Size	25mm(1″)~200mm(8″)	Local Display	LCD Display With Back Light, Displays Total, Standard Condition Volume, Operating Condition Volume, Temperature and Pressure, Battery.
Measuring Medium	Various gases	Output	4-20mA Pulse
Flow Range	See next page	Communica-tion Protocol	RS485 HART
Protection Class	IP65	Power Con-sumption	Battery: ≤0.2mW External Power: ≤1 W
Accuracy	±1% ±1.5%	Construc-tion	Compact
Material	Stainless steel Aluminum alloy	Power Supply	24VDC, Ripple ≤50mV, 3.6VDC lithium battery
Working Tempera-ture	-30 ~ +80 °C (Standard)	Relative Humidity	5%-95%
Process Connection	Flange, Thread	Converter Housing	Aluminum Alloy, Stainless Steel
Working Pressure	Up to 4 MPa	Explosion Proof Class	Ex d II BT6 Gb

Model Selection

<b>OILWQ Series</b> Example: OILWQ-025216001R; DN25, R2, PN16, Aluminum, no explosion proof, 24V power, RS485									
Gas Turbine Flowmeter		XXX	X	X X	X	X	X	X	X
Size (mm)	Inside diameter code DN 25 = 025 DN 50 = 050 DN 100 = 100 ....								
Measure- ment Range	Range: R1	1							
	Range: R2	2							
	Range: R3	3							
Process Conne- ction	16: Inline Type, PN16 Flange 20: Inline Type, ASME 150 LB Flange 25: Inline Type, PN25 Flange 40: Inline Type, PN40 Flange XX: Inline Type, Other								
Material	Aluminum Alloy				0				
	Stainless Steel				1				
Explosion Proof Type	None					0			
	Ex d II BT6 Gb					1			
Power Supply	24 V D.C							1	
	Battery 3.6V							3	
Output Type	RS485								R
	HART								H

Specifications	Nominal diameter (mm)	Starting flow (m³/h)	Flow range (m³/h)	Working Pressure (MPa)	Shell Material	Accuracy
OILWQ-25	DN25(R1)	≤0.8	2.5~25	1.6	Stainless steel	At an accuracy of 1.0%, the allowable error is: Qmin~0.2Qmax: ±2% 0.2Qmax~Qmax: ±1%
	DN25(R2)	≤1.3	5~50		Aluminum alloy	
OILWQ-32	DN32(R1)	≤1.3	4~40		Stainless steel	
	DN32(R2)	≤1.5	6~60			
OILWQ-40	DN40(R1)	≤1.1	5~50		Stainless steel Aluminum alloy	
	DN40(R2)	≤1.5	6~60			
OILWQ-50	DN50(R1)	≤1.5	6~65	2.5		
	DN50(R2)	≤2.0	10~100			
		DN50(R3)	≤3.0	10~160		
OILWQ-65	DN65(R1)	≤2.0	10~100	4.0	Stainless steel	At an accuracy of 1.5%, the allowable error is: Qmin~0.2Qmax: ±3.0% 0.2Qmax ~Qmax: ±1.5%
	DN65(R2)	≤5.0	13~250			
OILWQ-80	DN80(R1)	≤3.5	8-160		Stainless steel Aluminum alloy	
	DN80(R2)	≤5.0	13~250			
	DN80(R3)	≤6.0	20~400			
OILWQ-100	DN100(R1)	≤5.0	13-250	1.6	Stainless steel Aluminum alloy	
	DN100(R2)	≤9.0	20~400			
	DN100(R3)	≤15.0	32~650			
OILWQ-125	DN125	≤15.0	40~800	2.5	Stainless steel	
OILWQ-150	DN150(R1)	≤10.0	32~650	4.0		
	DN150(R2)	≤14.0	50~1000			
	DN150(R3)	≤16.0	80~1600			
OILWQ-200	DN200(R1)	≤14.0	50~1000	1.6	Stainless steel	
	DN200(R2)	≤20.0	80~1600	2.5		
	DN200(R3)	≤25.0	130~2500			