



Vortex Flowmeter

Vortex flowmeter is an ideal high-precision flowmeter for measuring high-temperature steam. The maximum temperature up to 350 ℃, It can also be used for other gases and liquids; With 4-20ma, pulse signal output, MODBUS RS485 / HART optional, available Temperature and pressure compensation, anti-vibration , new digital filtering and correction functions make flow measurement more accurate and reliable.

Feature

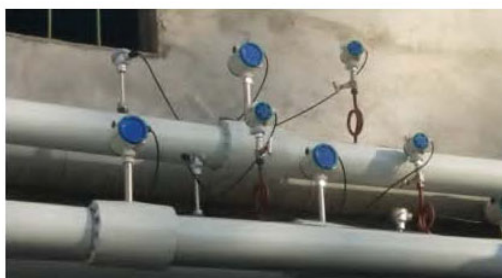
- Japan technology with embedded-type sensor,sensor could integrate with temperature.
- Circuit Board: Digital circuit board,anti-vibration and anti-interference.
- Flow converter: Distinctive modular design, amateurs can operate, disassemble and assemble easily, it will avoid accident risks.
- Integral forging, anti-rust, long service life
- Resist high temperature up to 350°C,normal temperature up to 250°C

Adapt to Various Complex Condition

One flow meter, Different Medium.

Steam, air and liquid all workable

Anti-interference, anti-vibration, resist high temperature



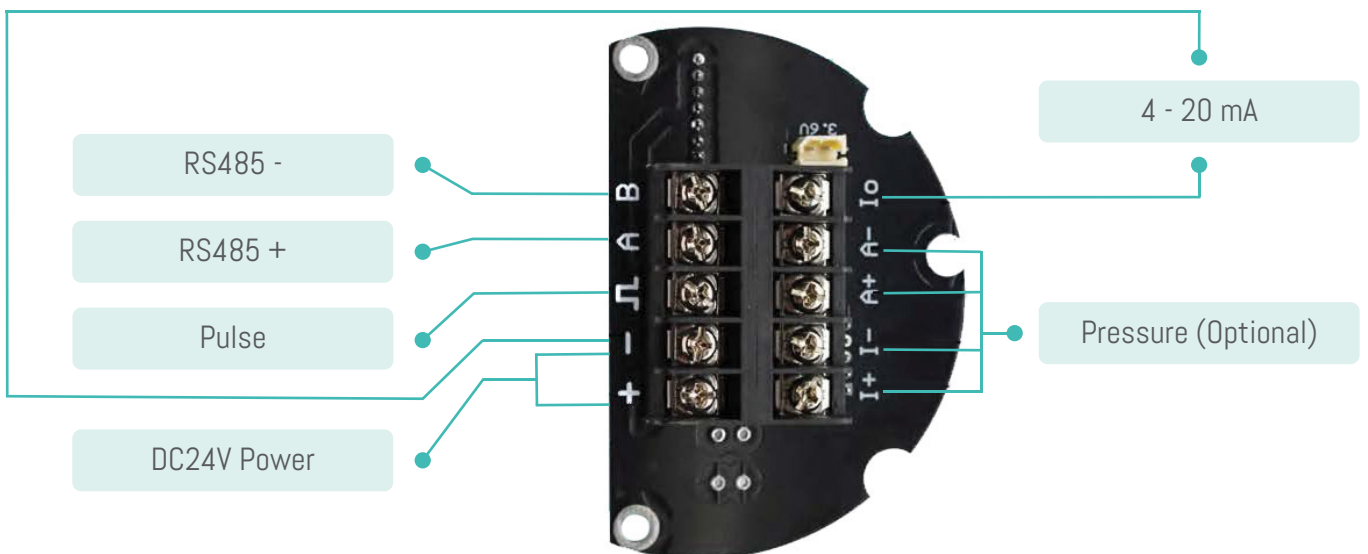
Big and Low Power Consumption LCD Display
 Come with back light is easy to debug and observe.



- Instantaneous Flow
- Total Flow
- Frequency, Density
Temperature,
Current or Percentage



Anti-vibration, Anti-interference Digital Circuit Board



High Stability And Accuracy

Built-in integrated flow and temperature sensor, no burrs, ensure stable signal and high accuracy measurement.

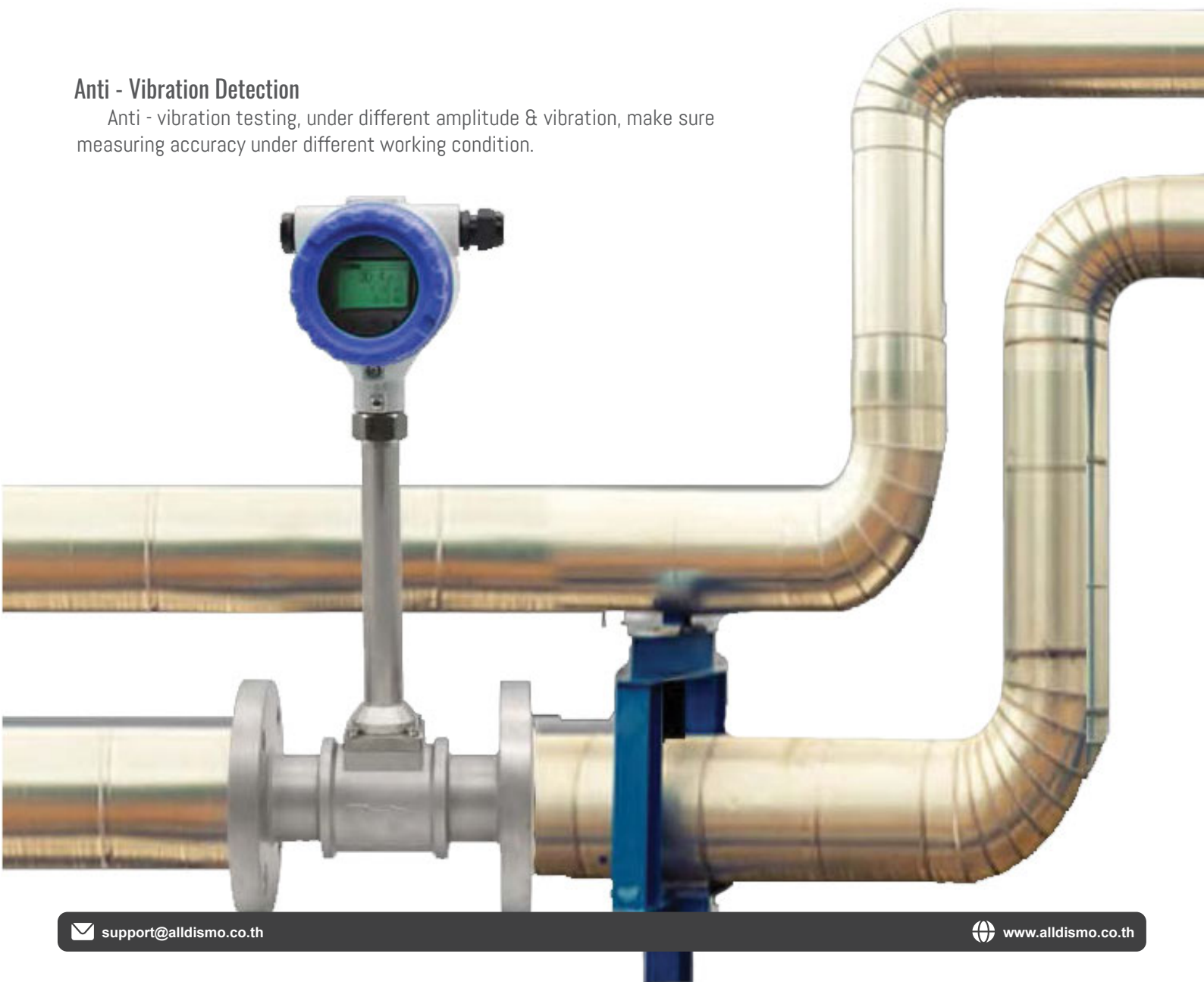


Integrally forged triangular prism, more stable and safe

- Impact testing, no leakage, stable signal.
- Built-in four piezoelectric crystals, eliminates interference and zero point drift.

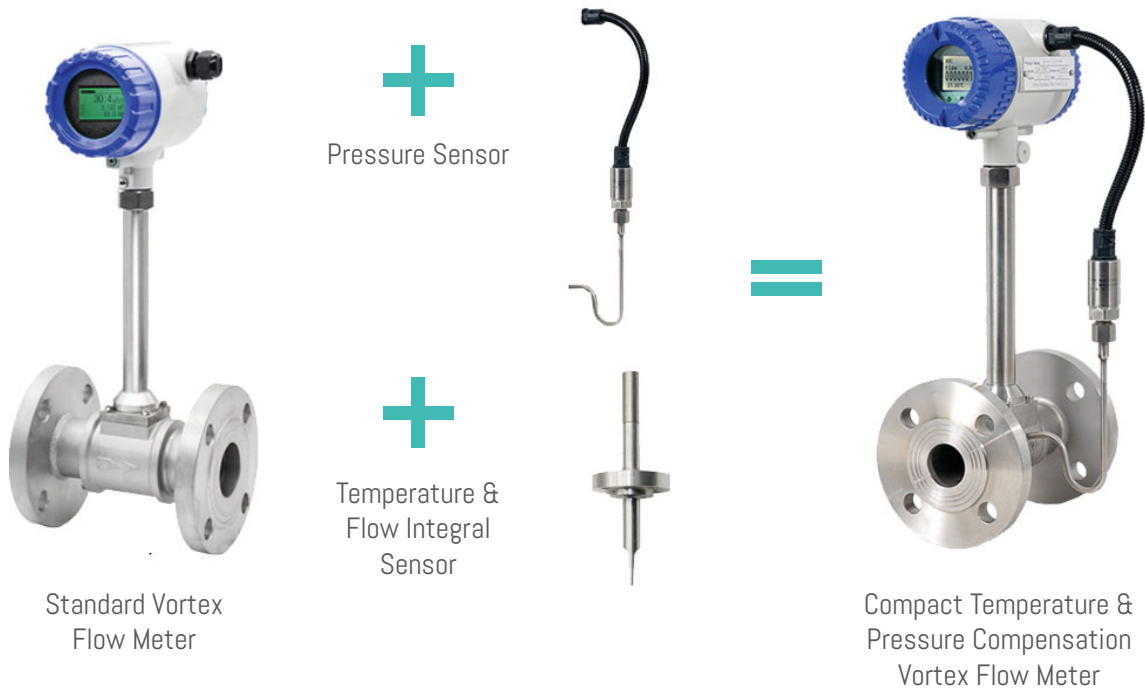
Anti - Vibration Detection

Anti - vibration testing, under different amplitude & vibration, make sure measuring accuracy under different working condition.



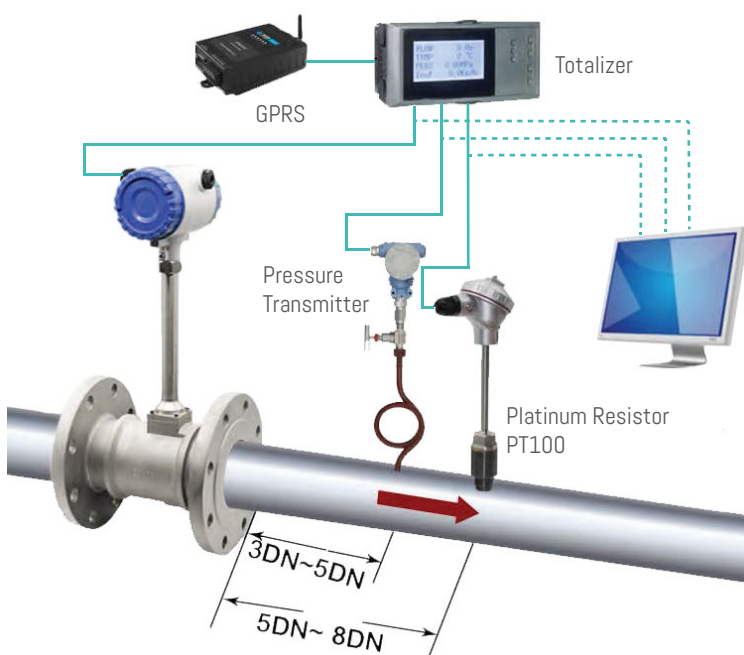
Compact Temperature & Pressure

Temperature and pressure compensation can choose one or two options



Remote Vortex Flow Meter

Optional functions select at will



Totalizer
Read temperature, pressure, flow at same time, easy to observe data

GPRS
Realize wireless remote reading, easy to receive signal

Pressure Transmitter
Realize pressure compensation

Platinum Resistor PT100
Realize temperature compensation

Product Group

Temperature and Pressure Compensation



Wafer Type



Remote Type



Insertion Type



Tri - Clamp Type



Flange Type



Thread Type



Installation Method



Concentric Reducers Pipeline



Concentric Expansion Pipeline



Single Square Bend



Two Square Bends At Same Plane



Two Square Bends At Different



Regulating Valve, Half-open Gate

Technical Performance Parameters

Measured Medium	Liquid, Gas, Steam
Medium Temp	-40 °C to +200 °C, -40 °C to +280 °C, 40 °C to +350 °C
Nominal Pressure	1.6 MPa, 2.5 MPa, 4.0 MPa, 64 MPa (Other pressure can be custom.need consult supplier)
Accuracy	1.0%(Flange), 1.5%(Insertion)
Measuring Range Ratio	1 : 10 (Standard air condition as reference) 1 : 15 (Liquid)
Flow Range	Liquid : 04-7.0 m/s, Gas : 4.0-60.0 m/s, Steam : 5.0-70.0 m/s
Specification	DN15 - DN300(Flange), DN80 - DN2000(Insertion), DN15 - DN100(Thread), DN15 - DN300(Wafer), DN15 - DN100(Sanitary)
Material	SS304(Standard), SS316(Optional)
Pressure Loss Coefficient	$C_d \leq 2.6$
Vibration Acceleration Allowed	$\leq 0.2 \text{ g}$
IEP ATEX	II IG Ex ia IIC T5 Ga
Ambient Condition	Ambient Temp : -40 °C to 65 °C(Non-explosion-proofsites), -20 °C to 55 °C(Explosion-proof site) Relative Humidity : $\leq 85\%$ Pressure : 86 KPa - 106KPa
Power Supply	12-24V/DC or 3.6V battery powered
Signal Output	Pulse frequency signal 2-3000Hz, Low level $\leq 1\text{V}$, high level $\geq 6\text{V}$ Two-wire system 4-20 signal(isolated output), Load ≤ 500

Flow Range

Size (mm)	Liquid (Reference medium : normal temperature water m3/h)		Gas(Reference medium : 20 °C, 101325 Pa condition air, m3/h)	
	Standard	Extended	Standard	Extended
15	0.8 - 6	0.5 - 8	6 - 40	5 - 50
20	1 - 8	0.5 - 12	8 - 50	6 - 60
25	1.5 - 12	0.8 - 16	10 - 80	8 - 120
40	2.5 - 30	2 - 40	25 - 200	20 - 300
50	3 - 50	2.5 - 60	30 - 300	25 - 500
65	5 - 80	4 - 100	50 - 500	40 - 800
80	8 - 120	6 - 160	80 - 800	60 - 1200
100	12 - 200	8 - 250	120 - 1200	100 - 2000
125	20 - 300	12 - 400	160 - 1600	150 - 3000
150	30 - 400	18 - 600	250 - 2500	200 - 4000
200	50 - 800	30 - 1200	400 - 4000	350 - 8000
250	80 - 1200	40 - 1600	600 - 6000	500 - 12000
300	100 - 1600	60 - 2500	1000 - 10000	600 - 16000
400	200 - 3000	120 - 5000	1600 - 16000	1000 - 25000
500	300 - 5000	200 - 8000	2500 - 25000	1600 - 40000
600	500 - 8000	300 - 10000	4000 - 40000	2500 - 60000

Superheated Steam Density Value (Relative Pressure & Temperature) Unit : Kg/m³

Absolute Pressure (MPa)	Temperature (°C)					
	150	200	250	300	350	400
0.1	0.52	0.46	0.42	0.38		
0.15	0.78	0.70	0.62	0.57	0.52	0.49
0.2	1.04	0.93	0.83	0.76	0.69	0.65
0.25	1.31	1.16	1.04	0.95	0.87	0.81
0.33	1.58	1.39	1.25	1.14	1.05	0.97
0.35	1.85	1.63	1.46	1.33	1.22	1.13
0.4	2.12	1.87	1.68	1.52	1.40	1.29
0.5		2.35	2.11	1.91	1.75	1.62
0.6		2.84	2.54	2.30	2.11	1.95
0.7		3.33	2.97	2.69	2.46	2.27
0.8		3.83	3.41	3.08	2.82	2.60
1.0		4.86	4.30	3.88	3.54	3.26
1.2		5.91	5.20	4.67	4.26	3.92
1.5		7.55	6.58	5.89	5.36	4.93
2.0			8.968	7.97	7.21	6.62
2.5			11.5	10.1	9.11	8.33
3.0			14.2	12.3	11.1	10.1
3.5			17.0	14.6	13.0	11.8
4.0				17.0	15.1	13.6

Model Select

		VTF	X	X	XXX		XXX		X
Connection Mode	Flange Connection		1						
	Wafer Connection		2						
	Insert Type		3						
	Other		4						
Measured Medium	Liquid			1					
	Common Gas			2					
	Saturated Steam			3					
	Superheated Steam			4					
	Others			5					
Insert Type	Size : Code	Size : Code	Size : Code		100	125			
	100 : 100	500 : 501	1600 : 162		151	201			
	125 : 125	600 : 601	1800 : 182		251	301			
	150 : 151	700 : 701	2000 : 202		351	351			
	200 : 201	800 : 801	None if require other		401	501			
	250 : 251	900 : 901	type.		701	801			
	300 : 301	1000 : 102			901	102			
	350 : 351	1200 : 122			122	142			
	400 : 401	1400 : 142			162	182			
					202				
Nominal Diameter Flange / Wafer Type	Size : Code	Size : Code	Size : Code			150	200		
	15 : 150	50 : 500	150 : 151			200	320		
	20 : 200	65 : 650	200 : 201			400	500		
	25 : 250	80 : 800	250 : 251			650	800		
	32 : 320	100 : 101	300 : 301			101	125		
	40 : 400	125 : 125				151	201		
						251	301		
Special Mark	Common								None
	Standard Signal Output								M
	Intrinsically Safe Explosion-proof								B
	On Site Display								X
	High Temperature 350 °C								G
	Temperature Compensation								W
	Pressure Compensation								Y
Temperature & Pressure Compensation								Z	