pFlow

F2 Ultrasonic Flowmeter For Small Pipe Size Series

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About F2

F2 ultrasonic flowmeter is designed for catering to the small pipe size of PVC, carbon steel, stainless steel, copper which can be widely used in HVAC chilled water system, building automation system, farming irrigation system, residential water supply system, cleaning system, recirculating aquaculture system(RAS), etc. It is very easy to install, the installation only needs 30s at fast. The compact structure, is suitable for various narrow working environments.

RS-485

Wi Fi

4-20 mA

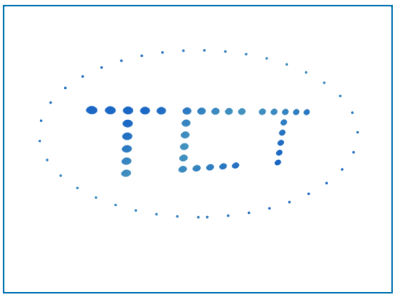
LCD

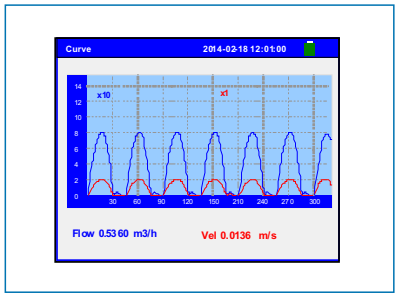
Main characters:

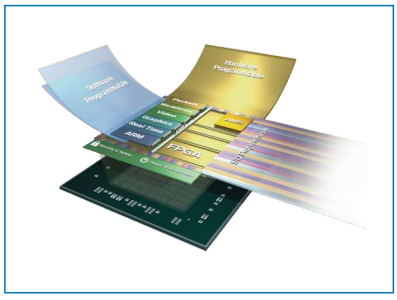
The product is an integrated structure design, which is easy to install through four screws, andhas special insulation on the outside. The jacket reduces the hassle of field installation. It isunnecessary to cut the pipe, stop flow for installation and there is no pressure loss. F2 also hasrich network functions, supporting Wi-Fi, 4-20mA output, etc, with Cloud data storage andanalysis management system. You can have access to "Gentos iCloud", or customize the versionthat connects to your own cloud system/intelligent management system, realized unattendedand unified administration.

TCT Technology

The TCT (Time Comb Technology) is a kind of technology used to measure signal flight time.The technology is invented by Gentos Measurement & Control Co., Ltd. in 2019. Since thetechnology was invented, it has achieved the time measurement accuracy of 50ps (TVT is130ps), and has outstanding characteristics of high accuracy, high stability and low cost.

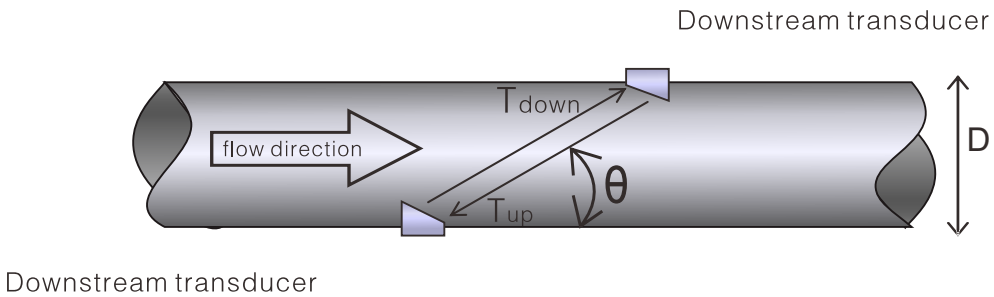






Working Principle

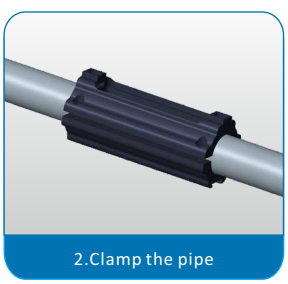
When the ultrasonic signal is transmitted and received through the moving liquid, there will be a difference between the upstream and downstream transit time, which can be used to calculate flow and velocity.

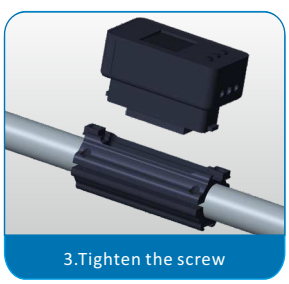


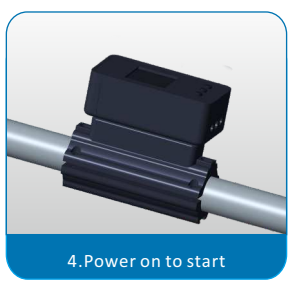
Installation Steps

The F2 clip on meter is measured with an integrated design. The installation is very simple. F2 is directly clipped on the pipe section, and tightened the screw to turn on the power flow measurement.


1.Take out the product


2.Clamp the pipe


3.Tighten the screw


4.Power on to start

Performance specifications	
Flow range	±0.098ft/s ~ ±16ft/s (±0.03m/s ~ ±5m/s)
Accuracy	±2.0%
Pipe size	DN20 DN25 DN32 DN40 DN50 DN65 DN80
Fluid	Water
Pipe material	PVC, Carbon Steel, Stainless Steel, Copper
Function specifications	
Outputs	Analog output:4~20mA, max load 750Ω.
Communication interface	WIFI(standard), TTF/RS485(optional), Cannot be used at the same tine；Support FUJI protocol and MODBUS protocol
Power supply	10~36VDC/500mA
Temperature	Transmitter:14℉~122℉(-10℃~50℃) Transducer measurement medium:32℉~140℉(0℃~60℃)
Humidity	Up to 99% RH,non-condensing
Physical specifications	
Transmitter	PC/ABS
Keyboard	3 touch Keys
Display	1.44''LCD
Protection Rate	Ip54
Cable Lenght	Power cable: standard lenght 2m

Dimensions Unit:mm Pipe material(PVC, Carbon Steel, Stainless Steel)								
Model	Ø	W	W1	L	L1	H	Flow Range m^3/h	Weight(kg)
DN20	25~29	60	51	105	115	101	0.04~6	0.68
	21~25	60	51	105	115	101		
DN25	32~36	60	56	105	115	108	0.05~9	0.71
	28~32	60	56	105	115	108		
DN32	39~43	60	63	105	115	115	0.09~15	0.82
	35~39	60	63	105	115	115		
DN40	50~54	60	74	105	115	126	0.13~23	0.96
	46~50	60	74	105	115	126		
DN50	63~67	60	89	105	115	139	0.20~35	1.1
	59~63	60	89	105	115	139		
DN65	76~80	60	102	105	115	152	0.35~60	1.6
	72-76	60	102	105	115	152		
DN80	87~91	60	113	105	115	163	0.55~90	2.0
	83~87	60	113	105	115	163		

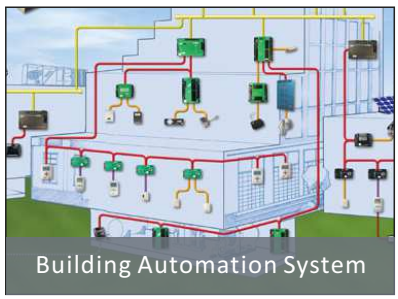
Dimensions Unit:mm Pipe material(Copper)								
Model	Ø	W	W1	L	L1	H	Flow Range m^3/h	Weight(kg)
DN20	25~29	60	51	105	115	121	0.04~6	0.68
	21~25	60	51	105	115	121		
DN25	25~29	60	56	105	115	128	0.05~9	0.71
	21~25	60	56	105	115	128		
DN32	32~36	60	63	105	115	135	0.09~15	0.82
	28~32	60	63	105	115	135		
DN40	39~43	60	74	105	115	146	0.13~23	0.96
	35~39	60	74	105	115	146		
DN50	50~54	60	89	105	115	159	0.20~35	1.1
	46~50	60	89	105	115	159		
DN65	63~67	60	102	105	115	172	0.35~60	1.6
	59~63	60	102	105	115	172		
DN80	76~80	60	113	105	115	183	0.55~90	2.0
	72~76	60	113	105	115	183		

Building Energy Saving

Applications

It can be widely used in HVAC system, building automation system, farming irrigation system, residential water supply system, cleaning system, recirculating aquaculture system(RAS), etc.

Fariming Irrigation



Building Automation System

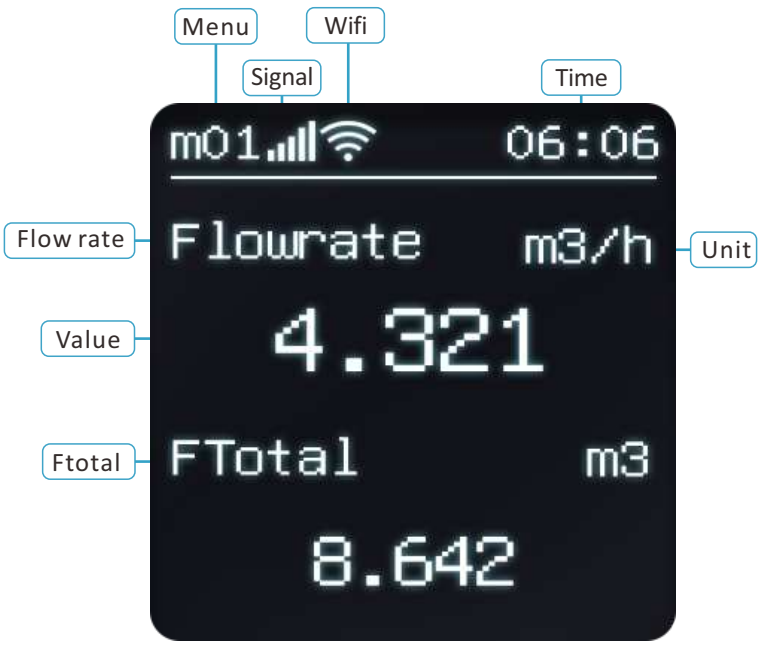
Residential water supply

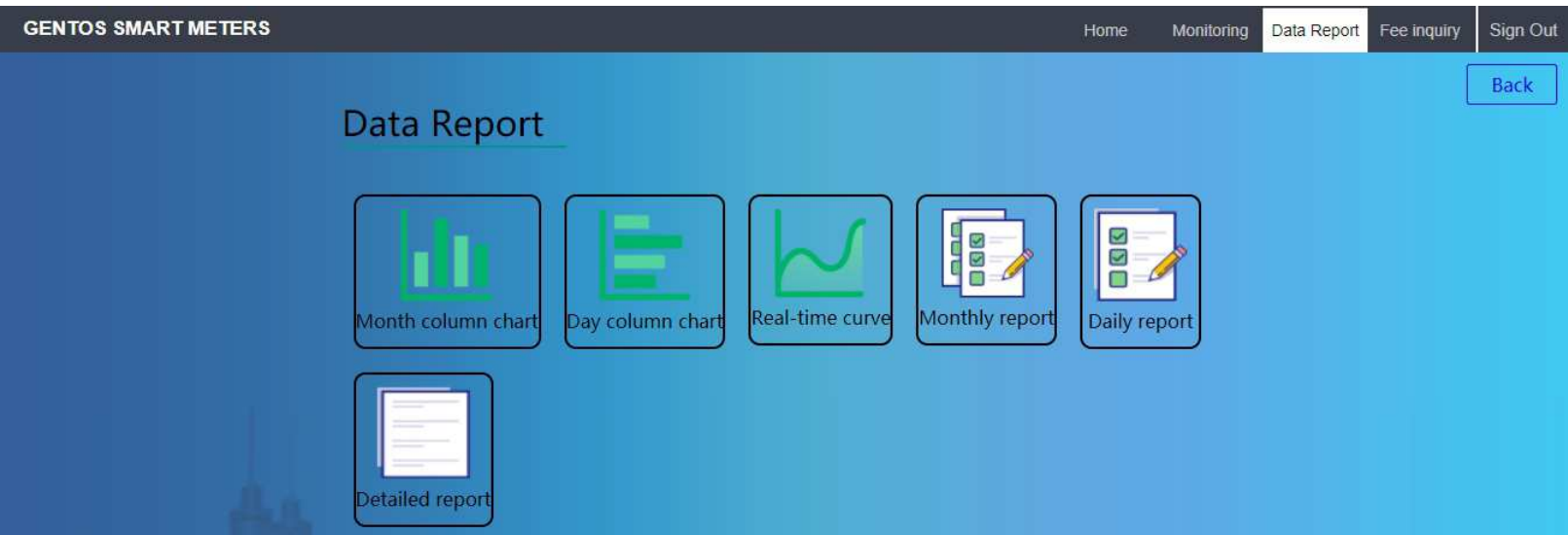
Cleaning system

Recirculating Aquaculture System

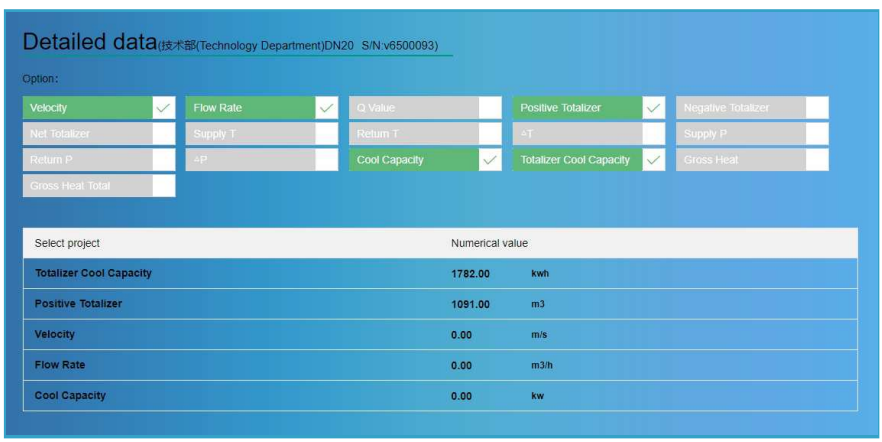
HVAC

Clamp-on type ultrasonic flow meter is for the difficulty of installing a conventional model in an old building. It features with clamp-on measurement, no need to cut pipes and to shut down machines. Easy operation menu Displaying Instantaneous Flow and Selecting Flow Units Optional unit, m3/h, l/m, gpm(UK), cfm, gpm(USA)





Gentos icloud data storage and analysis Management functions. Data collection can meet different working conditions. Scan the QR code and experience the system!



Experience Account ID: gentos Password: gentos0755

Ordering Information

Description	
F2	Digital Correlation Transit Time Flowmeter Installation method: Clamp-on Flow Range: ±0.098ft/s ~ ±16ft/s (±0.03m/s ~ ±5m/s) Accuracy: ±2.0% (±1.6ft/s~±16ft/s) (±0.5m/s~±5m/s) Pipe Size Range: DN20 DN25 DN32 DN40 DN50 DN65 DN80 Keyboard:3 touch Keys Display: 1.44" LCD Power supply: 10~36VDC/500mA Protection Rate: IP54 Output: WIFI,4~20mADC, OCT pulse output, relay output Communication: RS-485 terminal Modbus Protocol
Output	
1	WIFI(Standard)
2	4-20mA(optional)
3	RS-485(optional)
4	TTL(optional)
Transmitter enclosure area classification	
1	Ip54, PC/ABS enclosure
Type of transducers	
CP	Clamp on transducer, Operating temperature:32~ 140(0~ 60)
Transducer Cable Length	
07	Standard 7ft (2m)
Pipe Size	
DN	DN20 DN25 DN32 DN40 DN50 DN65 DN80

Standard Model: F2-1-1-CP-07-DN(pipe size)
Description: Standard enclosure with Clamp-on transducers, WIFI, 2m cable.

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