# **PFlow** E3 Ultrasonic Energy Meter



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## E3 Ultrasonic Energy Meter

Easy to Install Not need adjust

02

#### About E3

E3 ultrasonic energy meter is designed for catering to the small pipe size of PVC, carbon steel, stainless steel, copper which can be widely used in saving-energy, air-conditioning, building automation system, data central, energy audit, HVAC, etc. It is very easy to install. The installation only needs 30 seconds. It is simple to use, and very portable because of small size. This would help you save the next sales cost significantly.

Based on the TCT (Time Comb Technology), a kind of technology used to measuring signal flight time, E3 is invented

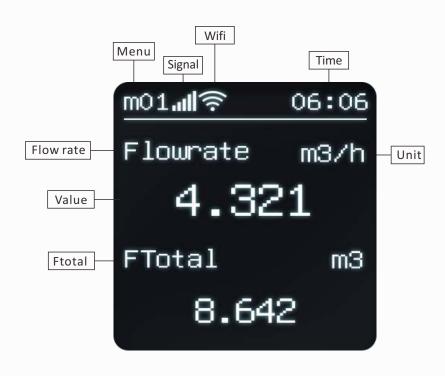
#### Main characters:

The product is an integrated structure design, which is easy to install through four screws, and has special insulation on the outside. The jacket reduces the hassle of field installation. Its characteristic is that it can be measured with the buckle. There is no need to cut the pipe, and there is no need to stop. At the same time, it also has rich network functions, supporting Wi-Fi, Bluetooth, etc.. And It can realize icloud data storage and analysis management functions. You can have access to "Gentos iCloud" or your own icloud data center. Data collection can meet different working conditions.

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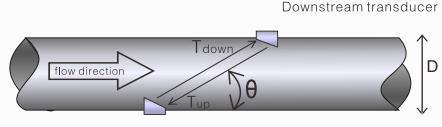
#### Menu Display

Every meter is strictly tested before delivery. The meter can normally operate without setting.



#### 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.



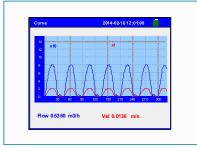
Downstream transducer

### TCT Technology

#### TCT Technology

The TCT (Time Comb Technology) is a kind of technology used to measuring signal flight time. The technology is invented by Gentos Measurement & Control Co., Ltd. in 2019. Since the technology was invented, it has achieved the time measurement accuracy of 50ps (TVT is 130ps), and has outstanding characteristics of high accuracy, high stability and low cost.

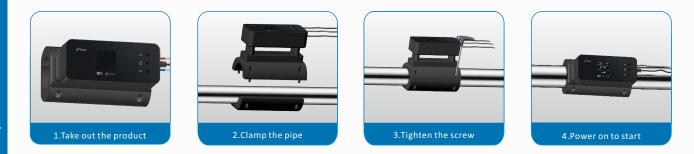






#### **Installation Steps**

The clip on meter is measured with an integrated design, The installation is very simple. There is no need to break the pipe, stop the pump, and set parameter. E3 is directly clipped on the pipe section, and tightened the screw to turn on the power flow measurement.



## Specification

Performance specifications					
Accuracy	±2.0%				
Measuring Medium	m Water				
Pipe Material	ABS				
Protection Rate	IP55				
Digital Communications	RS-485, MODBUS RTU, WIFI, BLUETOOTH				
Pipe Sizes DN20 DN25 DN32 DN40 DN50 DN65 DN80					
Pipe Material	PVC, Carbon Steel, Stainless Steel, Copper				
Function specifications					
Power Supply	ly 10~36VDC, @500mAMax				
Temperature	Transmitter: −10 $^{\circ}$ C ~ 50 $^{\circ}$ C, Transducer: 0 $^{\circ}$ C ~ 60 $^{\circ}$ C PT1000 sensor: 0 $^{\circ}$ C ~100 $^{\circ}$ C				
Humidity Up to 99% RH; Non-condensing					
Physical specifications					
Transmitter	ABS				
Power Supply Cable	2.0 m (standard)				
Display	OLCD Display				
Weight 0.68 kg-2.0kg					

Dimensions Unit:mm								
Model	Ø	L	W	h	Flow Range	Weight(kg)		
DNDO	25~27	140	60	126	0.05~5	0.68		
DN20	27~29	140	60	127				
DN25	31.5~33.5	140	60	129	0.07~7	0.71		
DNZS	33.5~35.5	140	60	127				
DN32	38.5~40.5	140	60	132	0.12~12	0.82		
	40.5~42.5	140	60	133				
DN40	48~50	140	60	143	0.2~20	0.96		
DN40	52~54	140	60	145				
DN50	59.5~61.5	140	60	154	0.6~5	1.1		
DNJU	61.5~63.5	140	60	154				
DN65	65~67	140	60	162	0.05~5	1.6		
	71.5~73.5	140	60	166				
	74.5~76.5	140	60	167				
DN80	77.5~79.5	140	60	174	0.05~5	2.0		
	88.5~90.5	140	60	185				

