



*p*Flow

ULTRASONIC

Gentos Measurement & Control Co., Ltd

FLOWMETER

PRODUCT CATALOG

Certificate



CE



ISO14001:2015



MSDS Report



ISO9001:2016



TEST REPORT OF LITHIUM BATTERY PACK



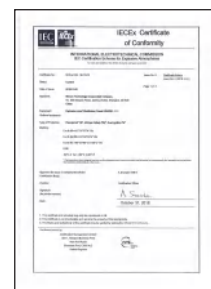
Calibration Certificate



EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY



EU Type Examination certificate



IECEx certificate of conformity



MEASURING INSTRUMENT APPROVAL CERTIFICATE OF P.R.C

R&D Center



Engineering Team

Multipath Ultrasonic Flowmeter D348D Plus

Introduction:

Introducing our High Accuracy Ultrasonic Multipath Flow Meter, designed for precise liquid measurements across various industries. With 1 to 6 channels, it ensures exceptional accuracy using advanced ultrasonic technology. The robust design and user-friendly interface simplify installation and maintenance. Ideal for water management, chemical processing, and more, this flow meter offers unparalleled precision and efficiency. Enhance your operations with our versatile and innovative flow measurement solution.



Flow Velocity	$\pm(0.03 \text{ ft/s} \sim 23 \text{ ft/s}), \pm(0.01 \text{ m/s} \sim 7 \text{ m/s})$
Pipe Size	1"~200"(25mm~5000mm), support 2~6 sound channels
Accuracy	$\pm 0.5\%$ of measured value
Repeatability	0.10%
Application	Water, sewage (with low particle content) and seawater, water plant, sewage treatment plants, plant irrigation, cooling water, energy-saving monitoring, water-saving management...
Pipe Material	Steel, ABS, Aluminum, Brass, Cast iron, Bronze, PVC, Polyethylene...
I/O	RS-232, RS-485 Communication Interface, Support Modbus Protocol Analog output: 4~20mA, maximum: 750 Ω Pulse output: 0~9999Hz, OCT output (adjustable) Relay output: the highest 1Hz (1A@125VAC or 2A@30VDC)
Power Supply	90~250VAC@48~63Hz or 10~36VDC
Temperature	Transmitter: -10 $^{\circ}\text{C}$ ~60 $^{\circ}\text{C}$ Transducer: -40 $^{\circ}\text{C}$ ~80 $^{\circ}\text{C}$ (standard)
IP Rating	Transmitter: Die-cast aluminum, IP65 Transducer: Encapsulated design, IP68
Transducer Cable	The standard length of cable: 30ft (9m)

Ultrasonic Flowmeter P118i

Introduction:

Our High Accuracy Ultrasonic Portable Flow Meter offers precise liquid measurement with clamp-on transducers and sensor magnet rails. This portable device ensures reliable readings and easy installation, making it perfect for a variety of applications. Ideal for quick, non-intrusive measurements, it combines advanced technology with user convenience, delivering unparalleled accuracy and efficiency in liquid flow monitoring. Elevate your operations with this innovative flow measurement solution.



Flow Velocity	$\pm (0.03 \sim 40) \text{ ft/s}$, $\pm (0.01 \sim 12) \text{ m/s}$
Pipe Size	0.6" ~ 240" (15mm~6000mm)
Accuracy	$\pm 0.5\%$ of measured value 1.5 ft/s ~ 40 ft/s or -1.5 ft/s ~ -40 ft/s (0.5 m/s ~ 12 m/s or -0.5 m/s ~ -12 m/s)
Repeatability	0.15%
Application	Water, sewage (with low particle content) and seawater, water plant, sewage treatment plants, plant irrigation, cooling water, energy-saving monitoring, water-saving management....
Pipe Material	Steel, ABS, Aluminum, Brass, Cast iron, Bronze, PVC, Polyethylene...
I/O	Analog output: 4 ~ 20 mA, (max load 750 Ω) Pulse output: 0 ~ 9999 Hz, OCT (min. and max. frequency is adjustable) Relay output: max. frequency 1Hz (1A@125VAC or 2A@30VDC)
Power Supply	Rechargeable Lithium Battery Power (continuous operation of main battery 10 hours)
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: -40°F to 176°F (-40°C ~ 80°C, standard)
Transmitter	NEMA13 (IP54)
Transducer	Encapsulated design, IP68
Transducer Cable	Standard cable length: 5m

Ultrasonic Flowmeter D118i

Introduction:

Experience unmatched precision with our High Accuracy Ultrasonic Wall Mount Flow Meter. Equipped with clamp-on transducers, a vibrant screen, and an advanced analyzer, this device ensures accurate liquid measurements. Its user-friendly design simplifies monitoring and installation, making it perfect for diverse applications. Upgrade your liquid flow monitoring with this state-of-the-art, reliable, and efficient solution.



Flow Velocity	0.03 ~ ±40ft/s (±0.01 ~ 12m/s)
Pipe Size	1" ~ 200" (25mm ~ 5000mm)
Accuracy	±0.5% of measured value 1.5 ft/s ~ 15 ft/s (0.5 m/s ~ 5 m/s)
Repeatability	0.10%
Application	Water, sewage (with low particle content) and seawater, water plant, sewage treatment plants, plant irrigation, cooling water, energy-saving monitoring, water-saving management....
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, Asbestos...
I/O	RS-232/RS-485 Modbus Protocol 4 ~ 20mA, maximum: 750Ω Pulse output: 0 ~ 9999Hz, OCT output (adjustable) Relay output: the highest 1Hz (1A@125VAC or 2A@30VDC)
Power Supply	90 ~ 250VAC @ 48 ~ 63Hz or 10 ~ 36VDC
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: -40°F to 176°F (-40°C ~ 80°C, standard)
Transmitter	Die-cast aluminum, IP65
Transducer	Encapsulated design, IP68
Transducer Cable	The standard length of cable: 9m

Ultrasonic Flowmeter D118

Introduction:

Precision meets versatility in our High Accuracy Ultrasonic Wall Mount Flow Meter, engineered for liquid applications. Featuring clamp-on transducers adept at measuring high temperatures and thermal energy, this meter delivers reliable, precise measurements. Streamlined installation and operational efficiency make it an ideal choice across diverse industries, ensuring robust performance in liquid flow monitoring.



Flow Velocity	$\pm(0.03\text{ft/s} \sim 40 \text{ ft/s}), \pm(0.01\text{m/s} \sim 12 \text{ m/s})$
Pipe Size	1" ~ 200" (25 mm~5000 mm)
Accuracy	$\pm 0.5\%$ of measured value 1.5 ft/s~40 ft/s or -1.5 ft/s~-40 ft/s (0.5 m/s~12 m/s or -0.5 m/s~-12 m/s)
Repeatability	0.15%
Application	Water, sewage (with low particle content) and seawater, water plant, sewage treatment plants, plant irrigation, cooling water, energy-saving monitoring, water-saving management....
Pipe Material	Carbon Steel, PVC, Stainless Steel, Aluminum, Cast Iron, Asbestos, Ductile Iron, Copper...
I/O	RS232 & RS485 Analog output: 4 ~ 20 mA, (max load 750 Ω) Pulse output: 0 ~ 9999 Hz, OCT (min. and max. frequency is adjustable) Relay output: SPST max. frequency 1Hz (1A@125VAC or 2A@30VDC)
Power Supply	90 ~ 245 VAC (48 ~ 63 Hz) Or 10 ~ 36 VDC
Temperature	Transmitter: 14°F ~ 122°F (- 10°C ~ 50°C)
Temperature	Transducer: -40°F ~ 176°F (- 40°C ~ 80°C, standard)
Transmitter	Die-cast aluminum, IP65
Transducer	Encapsulated design
Transducer Cable	Standard / Maximum cable length: 30 ft/1000 ft (9m / 305m)

Ultrasonic Flowmeter P117

Introduction:

Our Economic Ultrasonic Portable Flow Meter sets a new standard in liquid measurement. Featuring clamp-on transducers and sensor magnet rails, this versatile device offers cost-effective accuracy. Designed for ease of use and reliability, it provides seamless installation and operation across diverse industrial applications. Enhance your workflow with this efficient and economical solution for precise liquid flow monitoring.



Flow Velocity	$\pm(0.03 \sim 20)\text{ft/s}$, $\pm(0.01 \sim 6)\text{m/s}$
Pipe Size	1"~48" (25mm~1200mm)
Accuracy	$\pm 1.0\%$ of measured value
Repeatability	0.30%
Application	Water, sewage (with low particle content) and seawater, water plant, sewage treatment plants, plant irrigation, cooling water, energy-saving monitoring, water-saving management...
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, Asbestos, Fiber Glass-Epoxy...
I/O	Analog output: 4 ~ 20 mA, Max load 750 Ω
Power Supply	Rechargeable Lithium Battery Power (continuous operation of main battery 6 hours)
Temperature	Transmitter: 14°F ~ 122°F (- 10°C ~ 50°C)
Temperature	Transducer: -40°F ~ 176°F (- 40°C ~ 80°C, standard)
Transmitter	NEMA13 (IP54)
Transducer	Encapsulated design, IP68
Transducer Cable	Standard cable length: 5m

Ultrasonic Flowmeter D116

Introduction:

The D116 is a wall-mounted, clamp-on flow meter, which is compact and lightweight, facilitates disassembly and reinstallation, and does not damage any facilities.



Flow Velocity	0.03 ~ 16 ft/s (0.01 ~ 5.0 m/s)
Pipe Size	1" to 48" (25mm ~ 1200mm)
Accuracy	± 1.0%
Repeatability	0.30%
Application	HVAC, Process industries, Energy management and environmental monitoring, Agriculture and irrigation systems, Facilities management, Industrial maintenance and troubleshooting
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, Asbestos, Fiber Glass-Epoxy
I/O	Analog output: 4~20mA, max load 750Ω. Pulse output: 0~9999Hz, OCT, (min. and max. frequency is adjustable)
Power Supply	10~36VDC/1A
Temperature	Transmitter: 14°F ~ 122°F (-10°C ~ 50°C)
	Transducers(CP037): 32 °F ~ 176°F (0°C ~ 80°C) Temperature sensors(PT1000): 32°F ~ 212°F (0°C ~ 100°C)
IP Rating	Transmitter: IP65 Transducers: IP68
Transducer Cable	Standard/maximum cable length: 30ft/985ft (9m/300m)

Ultrasonic Energy Meter E5

Introduction:

The E5 clamp-on ultrasonic energy meter offers non-contacting measurement with uncomplicated mounting and minimum maintenance. The flowmeter can be installed and seamlessly integrated without intervention in the piping system or in the production process.



Pipe Size	1" to 48" (25mm to 1200mm)
Accuracy	± 1.0%
Repeatability	0.30%
Application	HVAC, Process industries, Energy management and environmental monitoring, Agriculture and irrigation systems, Facilities management, Industrial maintenance and troubleshooting
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, Asbestos, Fiber Glass-Epoxy
I/O	RS485, WiFi OCT Pulse output: 0-5000Hz. Analog output: 4 ~ 20mA, max load 750Ω
Power Supply	10~36VDC@1Amax
Temperature	Transmitter: 14°F ~ 122°F (-10°C ~ 50°C) Transducers (CP037): 32°F ~ 176°F (0°C ~ 80°C) Temperature sensors (PT1000): 32°F ~ 212°F (0°C ~ 100°C)
IP Rating	Transmitter: IP65 Transducers: IP68
Transducer Cable	Standard/maximum cable length: 30ft/985ft (9m/300m)

Ultrasonic Energy Meter E5E

Introduction:

E5E Ultrasonic Energy Meter can realize the function of measurement of "cold" and "heat" independently in both directions. It adopts advanced modular design, independent menu operation and LCD backlight display. It is suitable for continuous measurement of cooling and heating of chilled water and cooling water of central air conditioners to meet different measurement requirements.



Flow Velocity	0.03 ~ 16 ft/s(0.01 ~ 5.0 m/s)
Pipe Size	1" ~ 48" (25mm~1200mm)
Accuracy	± 1.0%
Repeatability	0.30%
Application	HVAC, Process industries, Energy management and environmental monitoring, Agriculture and irrigation systems, Facilities management, Industrial maintenance and troubleshooting
Pipe Material	1. Carbon steel 2. Stainless steel 3. PVC
I/O	Input: PT1000 interface/POE, HTTP MQTT Protocol
Power Supply	POE
Temperature	Transmitter: 14°F~122°F(-10°C~50°C) Transducers(CP037): 32°F~176°F(0°C~80°C) Temperature sensors(PT1000): 32°F~212°F(0°C~100°C)
IP Rating	Transmitter: IP65 Transducers: IP68
Transducer Cable	Standard/maximum cable length: 30ft/985ft(9m/300m)

Ultrasonic Flow Meter F5

Introduction:

F5 is a Digital Correlation Transit Time Flowmeter, with clamp on transducer and clamp on temperature transducers, used to track water flow and can be installed onto single use water or closed circuit chilled or heating water loops. Applications are wide ranging but most factories typically seek to use this meter to reduce water consumption or as a proof of flow through their system.



Flow Velocity	0.03 ~ 16 ft/s(0.01 ~ 5.0 m/s)
Pipe Size	1" ~ 48" (25mm~1200mm)
Accuracy	± 1.0%
Repeatability	0.30%
Application	HVAC, Process industries, Energy management and environmental monitoring, Agriculture and irrigation systems, Facilities management, Industrial maintenance and troubleshooting
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, Asbestos, Fiber Glass-Epoxy
I/O	Analog output: 4~20mA, max load 750Ω. Pulse output: 0~9999Hz, OCT, (min. and max. frequency is adjustable)
Power Supply	10~36VDC@1Amax
Temperature	Transmitter: 14°F ~122°F (-10°C~50°C) Transducers(CP037): 32°F ~176°F (0°C~80°C)
IP Rating	Transmitter: IP65 Transducers: IP68
Transducer Cable	Standard/maximum cable length: 30ft/985ft(9m/300m)

Ultrasonic Flow Meter F5E

Introduction:

F5E ultrasonic flowmeter combines ultrasonic flowmeter, Internet+, and advanced modular. Combined with Gentos ultrasonic signal processing technology and unique flow algorithm, fluidflow in the pipeline can be accurately measured.

It adopts POE power supply and Ethernet communication to realize cloud data. Users can manage, analyze and monitor measurement data information by access cloud data through mobile terminals and PC terminals anywhere and anytime.



Flow Velocity	0.01~5.0 m/s (0.03~16 ft/s)
Pipe Size	Clamp-on: DN25~DN1200 (1"~48")
Accuracy	±1% (0.3~5m/s standard condition)
Repeatability	0.20%
Pipe Material	1. Carbon steel 2. Stainless steel 3. PVC
Power Supply	POE Network cable power supply
Temperature	Transmitter temperature: -10℃~50℃ Transducer temperature: 0℃~80℃
Transmitter	PC/ABS plastic housing, IP65
Transducer	Sealed design, IP68
Transducer Cable	Flow sensor standard length: 9m (30ft)

Ultrasonic Energy Meter E8

Introduction:

E8 series ultrasonic energy meter is a state-of-the-art transit time ultrasonic flowmeter. Designed using the latest digital technology and low-voltage broadband pulse transmission.

While principally designed for full-pipe clean liquid applications. The instrument is tolerant of liquids with small amounts of air bubbles or suspended solids found in most industrial environments.



Flow Velocity	$\pm(0.03\text{ft/s} \sim 40 \text{ ft/s})$ $\pm(0.01\text{m/s} \sim 12 \text{ m/s})$
Pipe Size	1" ~ 200" (25 mm~5000 mm)
Accuracy	Flow accuracy: $\pm 0.5\%$ of measured value. Energy accuracy: $\pm 2\%$. 1.5 ft/s ~ 40 ft/s or -1.5 ft/s ~ -40 ft/s (0.5 m/s ~ 12 m/s or -0.5 m/s ~ -12 m/s)
Repeatability	0.15%
Application	It can be widely used in saving-energy, air-conditioning, building automation system, data central, energy audit, HVAC, etc
Pipe Material	Carbon Steel, PVC, Stainless Steel, Asbestos, Cast Iron, Aluminum, Ductile Iron, Fiber Glass-Epoxy, Copper, etc
I/O	Analog output: 4 ~ 20 mA, (max load 750 Ω) Pulse output: 0 ~ 9999 Hz, OCT (min. and max. frequency is adjustable) Relay output: SPST max. frequency 1Hz (1A@125VAC or 2A@30VDC) 2*PT1000 interface Three-wire system: 0~100°C (32~212°F) heat (cold) energy meter WiFi, RS232 & RS485
Power Supply	90 ~ 245 VAC (48 ~ 63 Hz) Or 10 ~ 36 VDC
Temperature	Transmitter: 14°F ~ 122 °F (- 10°C ~ 50°C) Transducer: -40 °F ~ 176 °F (- 40 °C ~ 80 °C standard)
Transmitter	Die-cast aluminum, IP65
Transducer	Encapsulated design, IP68
Transducer Cable	Standard / Maximum cable length: 30 ft / 1000 ft (9m / 305 m)

Ultrasonic Flow Meter F8

Introduction:

F8 series ultrasonic energy meter that can realize the bidirectional independent measurement function of "cold" and "hot". It adopts advanced modular all-in-one design, independent menu operation, LCD backlight display, and it is suitable for the continuous measurement of cooling and heating energy of central air-conditioning's chilled water and cooling water, meeting different measurement requirements.



Flow Velocity	$\pm(0.03\text{ft/s} \sim 40 \text{ ft/s})$ $\pm(0.01\text{m/s} \sim 12 \text{ m/s})$
Pipe Size	1" ~ 200" (25 mm ~ 5000 mm)
Accuracy	$\pm 0.5\%$ of measured value. 1.5 ft/s ~ 40 ft/s or -1.5 ft/s ~ -40 ft/s (0.5 m/s ~ 12 m/s or -0.5 m/s ~ -12 m/s)
Repeatability	0.15%
Application	It can be widely used in saving-energy, air-conditioning, building automation system, data central, energy audit, HVAC, etc
Pipe Material	Carbon Steel, PVC, Stainless Steel, Asbestos, Cast Iron, Aluminum, Ductile Iron, Fiber Glass-Epoxy, Copper, etc
I/O	Analog output: 4 ~ 20 mA, (max load 750 Ω) Pulse output: 0 ~ 9999 Hz, OCT (min. and max. frequency is adjustable) Relay output: SPST max. frequency 1Hz (1A@125VAC or 2A@30VDC) WiFi, RS232 & RS485
Power Supply	90 ~ 245 VAC (48 ~ 63 Hz) Or 10 ~ 36 VDC
Temperature	Transmitter: 14°F ~ 122 °F (- 10°C ~ 50°C) Transducer: -40 °F ~ 176 °F (- 40 °C ~ 80 °C, standard)
Transmitter	Die-cast aluminum, IP65
Transducer	Encapsulated design, IP68
Transducer Cable	Standard / Maximum cable length: 30 ft / 1000 ft (9m / 305 m)

MFCL Ultrasonic Micro Flowmeter

Introduction:

The MFCL micro flow meter is suitable for supporting new energy equipment, medical devices, smart aquaculture equipment, smart agricultural equipment, and more.

It adopts the measurement principle of ultrasonic-time method, relies on high reliability signal processing circuits, and accurately measures flow rate through complex algorithms such as sampling, calculation, and correction.



Flow Velocity	0.03m/s~5.0m/s
Pipe Size	DN10 (OD13.5~18.5mm)
Accuracy	±2%, (0.3m/s ~5m/s)
Application	Pharmaceutical Equipment, Smart Farming Equipment, New Energy Equipment Supporting Intelligent Agricultural Equipment
Repeatability	0.40%
Pipe Material	Stainless Steel/ PVC/ Copper/ PPR (one pipe type/model)
I/O	4~20mA, RS485
Power Supply	10~36VDC/500mA
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: 32°F to 140°F (0°C ~ 60°C)
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: 32°F to 140°F (0°C ~ 60°C)
Transmitter	All-in-one
Transducer	Clamp on
Transducer Cable	φ5 six core cable, standard length: 2m

MFR Ultrasonic Micro Flowmeter

Introduction:

The MFR uses LoRa communication, a low-cost, ultra-remote technology, to transmit information at low frequencies. It uses the ultrasonic transit time measurement principle and patented flow algorithm technology for accurate fluid flow measurement. The product is an all-in-one, clip-on structure, easy to install, requiring only four steps and no contact with fluid media.



Flow Velocity	0.03m/s~5.0m/s
Pipe Size	DN10 (OD 13.5~18.5mm)
Accuracy	±2.0%
Repeatability	0.40%
Application	Pharmaceutical Equipment, Smart Farming Equipment, New Energy Equipment Supporting, Intelligent Agricultural Equipment
Pipe Material	Copper/ Stainless steel/ PVC/ PPR (one pipe type/model)
I/O	RS485+LoRa
Power Supply	10~36VDC/500mA
Temperature	Ambient Temperature: -10°C~50°C
Temperature	Fluid Temperature: 0°C~60°C
Transmitter	All-in-one
Transducer	Clamp On
Transducer Cable	φ5 six-core cable, standard length: 2m

GFCL Ultrasonic Flowmeter

Introduction:

The GFCL Ultrasonic Flow Meter (DN15-DN32) is a compact and efficient solution for precise liquid measurement. Featuring RS485 and 4-20mA output options, it ensures seamless integration and accurate data transmission. Designed for small-diameter pipes, it offers reliable performance and easy installation, making it ideal for various industrial applications.



Flow Velocity	0.03m/s~5.0m/s
Pipe Size	DN15, DN20, DN25, DN32
Accuracy	±2%, (0.3m/s ~5m/s)
Repeatability	0.40%
Application	Pharmaceutical Equipment, Smart Farming Equipment, New Energy Equipment Supporting Intelligent Agricultural Equipment
Pipe Material	Stainless Steel/ PVC/ Copper/ PPR (one pipe type/model)
I/O	4~20mA, RS485
Power Supply	10~36VDC/500mA
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: 32°F to 140°F (0°C ~ 60°C)
Temperature	Transmitter: 14°F to 122°F (-10°C ~ 50°C) Transducer: 32°F to 140°F (0°C ~ 60°C)
Transmitter	All-in-one
Transducer	Clamp on
Transducer Cable	φ5 six core cable, standard length: 2m

GFR Ultrasonic Flowmeter

Introduction:

Designed for precise liquid measurement, the GFR Ultrasonic Flow Meter (DN15-DN32) offers compact versatility and advanced technology. With RS485 and LoRa connectivity, it ensures reliable, long-range data communication. Ideal for small-diameter pipes, this flow meter provides accurate readings and straightforward installation, making it a valuable asset in various industrial environments.



Flow Velocity	0.03m/s~5.0m/s
Pipe Size	DN15, DN20, DN25, DN32
Accuracy	±2.0%
Repeatability	0.40%
Application	Pharmaceutical Equipment, Smart Farming Equipment, New Energy Equipment Supporting, Intelligent Agricultural Equipment
Pipe Material	Copper/ Stainless steel/ PVC/ PPR/ (one pipe type/model)
I/O	RS485+LoRa
Power Supply	10~36VDC/500mA
Temperature	Ambient Temperature: -10°C~50°C
Temperature	Fluid Temperature: 0°C~60°C
Transmitter	All-in-one
Transducer	Clamp On
Transducer Cable	φ5 six-core cable, standard length: 2m

E3CL/E3RO

Ultrasonic Thermal Energy/BTU Flow Meter

Introduction:

The E3CL/E3RO Clip-on Ultrasonic Thermal Energy / BTU Flow Meter uses ultrasonic time difference method and Gentos' ultrasonic flow algorithm technology for accurate measurement of fluid flow and heat volume in pipelines. It features an integrated external clamp structure for easy installation, avoiding contact with fluid mediums and production interruptions.



RS485



OCT Pulse&Relay



4~20mA

Flow Velocity	0.03m/s~5m/s
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%
Repeatability	0.20%
Application	HVAC, heating, energy-saving monitoring, heat balance regulation, heating regulation, AHU room, thermal energy transformation...
Pipe Material	PVC/Carbon Steel/Stainless Steel/Copper (one pipe type/model)
I/O	E3CL, RS485+4~20mA E3RO, RS485+OCT Pulse E3RO, RS485+Relay E3RO, OCT Pulse+Relay
Power Supply	10~36VDC/500mA
Temperature	Ambient Temperature: -10°C~50°C
Temperature	Fluid Temperature: 0°C~60°C
Transmitter	All-in-one
Transducer	Clamp On
Transducer Cable	φ5 six-core cable, standard length: 2m(6.6ft)

E3W

Ultrasonic Thermal Energy/BTU Flow Meter

Introduction:

The Gentos quick measure E3W uses ultrasonic transit time measurement and Gentos' flow algorithm technology for accurate fluid flow measurement in pipes. It's a simple, convenient, and all-in-one device that requires only four steps to install, requires no contact with fluid media, and supports WIFI communication for cloud data storage.



Flow Velocity	0.03m/s~5m/s
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%
Repeatability	0.20%
Application	HVAC, heating, energy - saving monitoring, heat balance regulation, heating regulation, AHU room, thermal energy transformation...
Pipe Material	PVC/Carbon Steel/Stainless Steel/Copper (one pipe type/model)
I/O	RS485, WIFI, Android App or PC web platform
Power Supply	10~36VDC/500mA
Temperature	Ambient Temperature: -10°C~50°C
Temperature	Fluid Temperature: 0°C~60°C
Transmitter	All-in-one
Transducer	Clamp On
Transducer Cable	φ5 six-core cable, standard length: 2m(6.6ft)

E3R

Ultrasonic Thermal Energy/BTU Flow Meter

Introduction:

E3R uses LoRa communication technology and supports LoRaWAN protocol, enabling low frequency, complexity, and cost-effective transmission of information. It offers ultra-long distance, low power consumption, high availability, and low cost, making it suitable for various regions. E3R uses ultrasonic transit time measurement and Gentos' flow algorithm for accurate fluid flow measurement. The all-in-one, clamp-on structure design is simple and convenient to install, requiring only four steps and no contact with fluid media.



Flow Velocity	0.03m/s~5m/s
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0ft/s~16ft/s)
Repeatability	0.20%
Application	HVAC, heating, energy - saving monitoring, heat balance regulation, heating regulation, AHU room, thermal energy transformation...
Pipe Material	PVC/Carbon Steel/Stainless Steel/Copper (one pipe type/model)
I/O	RS485+LoRa
Power Supply	10~36VDC/500mA
Temperature	Ambient Temperature: -10°C~50°C
Temperature	Fluid Temperature: 0°C~60°C
Transmitter	All-in-one
Transducer	Clamp On
Transducer Cable	φ5 six-core cable, standard length: 2m(6.6ft)

F3CL/F3RO

Clip-on Ultrasonic Flowmeter



RS485



OCT Pulse&Relay



4~20mA

Introduction:

pFlow F3CL\F3RO clip-on ultrasonic flowmeter adopts the measurement principle of ultrasonic transit-time method, is combined with Gentos' ultrasonic flow algorithm technology. Easy to install and monitoring water flow conveniently.



Flow Velocity	0.1ft/s~16ft/s (0.03~5.0m/s)
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0ft/s~16ft/s)
Repeatability	0.20%
Application	Modern Agricultural Irrigation, Garden Irrigation Seawater Desalination, Desalination Technology Residential Water, Washing Industries, HVAC
Pipe Material	Carbon Steel/ Stainless Steel/ Copper/ PVC (one pipe type/model)
I/O	F3CL, RS485+4~20mA F3RO, RS485+OCT Pulse F3RO, RS485+Relay F3RO, OCT Pulse+Relay
Power Supply	10~36VDC/500mA
Temperature	Transmitter: 14 °F to 122 °F (-10°C ~ 50°C) Transducer: 32 °F to 140 °F (0°C ~ 60°C)
IP Rating	IP54
Transducer Cable	φ5 six core cable, standard length: 2m

F3R

Clip-on Ultrasonic Flowmeter

Introduction:

The F3R uses LoRa communication with the LoRaWAN protocol, offering low-cost, low-complexity, ultra-remote, and low-power communication. It employs ultrasonic transit time measurement with Gentos' patented flow algorithm for accurate fluid flow measurement. The all-in-one, clip-on design ensures easy installation in four steps, without contacting the fluid media or needing to shut down the flow.



Flow Velocity	0.1ft/s~16ft/s (0.03~5.0m/s)
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0~16ft/s)
Repeatability	0.20%
Application	Golf courses, grape vineyard, modern agricultural irrigation, garden irrigation Residential water, washing industries, bathing industry, swimming pool, HVAC Water in production process, industrial circulating water, reclaimed water, pure/ultra pure water Inland aquaculture, RAS, etc.
Pipe Material	Carbon Steel/ Stainless Steel/ Copper/ PVC (one pipe type/model)
I/O	LoRa, RS485 FUJI or MODBUS Protocol
Power Supply	10~36VDC/500mA
Temperature	Transmitter: -10°C~50°C Transducer: 0°C~60°C
IP Rating	IP54
Transducer Cable	φ5 Six-core cable, standard length: 2m

F3E

Clip-on Ultrasonic Flowmeter

Introduction:

F3E adopts POE power supply and Ethernet communication to realize cloud data storage. Users can access cloud data anytime and anywhere through mobile terminals or PC terminals to manage, analyze and query measurement data information



POE power supply



LCD color display

Flow Velocity	0.1ft/s~16ft/s (0.03~5.0m/s)
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0~16ft/s)
Repeatability	0.20%
Application	Food and Beverage Processing HVAC (Heating, Ventilation, and Air Conditioning) Water and Wastewater Management
Pipe Material	Carbon Steel/ Stainless Steel/ Copper/ PVC (one pipe type/model)
I/O	HTTP, MQTT Protocol, POE
Power Supply	POE network cable power supply
Temperature	Transmitter: 14 °F to 122 °F (-10°C~ 50°C) Transducer: 32 °F to 140 °F (0°C ~ 60°C)
IP Rating	IP54
Transducer Cable	POE waterproof tail line, standard length: 0.5m

F3P

Panel Mount & Split Ultrasonic Flowmeter

Introduction:

The F3P Embedded ultrasonic flowmeter is designed with separate external clamping structure, simple and convenient to install. F3P adopts POE power supply and Ethernet communication to realize cloud data storage. Panel mount ultrasonic flowmeters are typically available in various sizes and configurations to accommodate different pipe sizes and flow rates.



Flow Velocity	0.1ft/s~16ft/s (0.03~5.0m/s)
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0~16ft/s)
Repeatability	0.20%
Application	HVAC (Heating, Ventilation, and Air Conditioning) Water and Wastewater Management Pharmaceuticals and Biotechnology Pulp and Paper Manufacturing Agriculture and Aquaculture
Pipe Material	Carbon Steel/ Stainless Steel/ Copper/ PVC (one pipe type/model)
I/O	Support HTTP Protocol and MQTT Protocol
Power Supply	POE network cable power supply
Temperature	Transmitter: 14 °F to 122 °F (-10°C ~ 50°C) Transducer: 32 °F to 140 °F (0°C ~ 60°C)
IP Rating	IP54
Transducer Cable	POE network cable, standard length: 2m

F3W

Clip-on Ultrasonic Flowmeter

Introduction:

The F3W Clip-on ultrasonic flowmeter adopts WIFI communication to realize cloud data storage. Users can access cloud data any-time and anywhere through mobile terminals or PC terminals to manage, analyze and query measurement data information.



Flow Velocity	0.1ft/s~16ft/s (0.03~5.0m/s)
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2%, (1.0~16ft/s)
Repeatability	0.20%
Application	Food and Beverage Processing HVAC (Heating, Ventilation, and Air Conditioning) Water and Wastewater Management
Pipe Material	Carbon Steel/ Stainless Steel/ Copper/ PVC (one pipe type/model)
I/O	RS485 (Standard) FUJI or MODBUS Protocol
WiFi	Frequency range: 2.412~2.484GHz Transmitted power: 802.11b 16±2 dBm ; 802.11n 13±2 dBm ; 802.11g 14±2 dBm Temperature: -20~85°C Theoretically, the transmission distance can be up to 40 meters in an open space environment
Power Supply	10~36VDC/500mA
Temperature	Transmitter: 14 °F to 122 °F (-10°C ~ 50°C) Transducer: 32 °F to 140 °F (0°C ~ 60°C)
IP Rating	IP54
Transducer Cable	φ5 Six-core cable, standard length: 2m

F2

Clip-on Ultrasonic Flow Sensor

Introduction:

The F2 uses ultrasonic transit time measurement with Gentos' patented flow algorithm for accurate fluid flow measurement. Its all-in-one, clip-on design allows for simple, four-step installation without contacting the fluid or shutting down the flow. This product is ideal for measuring pure, softened, and recycled water, making it perfect for embedded use in water treatment applications.



Flow Velocity	0.1~5.0m/s
Pipe Size	DN20, DN25, DN32, DN40, DN50, DN65, DN80
Accuracy	±2% of measured value FS, (0.5~5m/s)
Application	Water treatment and distribution, pharmaceutical, inland aquaculture, heating and cooling circuits, swimming pools and irrigation systems, fire fighting installations, automotive industry and energy plants.
Pipe Material	Carbon steel/ stainless steel/ copper/ PVC (one pipe type/model)
I/O	RS485, support FUJI protocol and MODBUS protocol, 4-20mA
Power Supply	10~36VDC/500mA
Temperature	Transmitter installation environment temperature: -10°C~50°C Medium temperature measured by transducer: 0°C~60°C
IP Rating	IP54
Transducer Cable	φ5 Six-core cable, standard length: 2m

VF600 Flow Control Valve

Introduction:

With the promotion of carbon neutrality, environmental protection, and low carbon strategies, awareness of energy saving is increasing. Given the relative shortage of water resources, saving water and improving its utilization has become urgent. The VF600 Flow Control Valve, an intelligent device, addresses this by controlling flow in three modes: constant flow, timer batch control, and intelligent valve adjustment, thus enhancing water resource utilization.



3 modes of flow
constant current, timer,
batch controller



Optional WiFi
wireless
communication mode



APP remot
operationse



Protection
level: IP54

Flow Velocity	0~3m/s
Pipe Size	Internal diameter 12mm
Application	Municipal garden irrigation, building water management, household water management, collective dormitory, water management, water production equipment process monitoring and control, aquaculture, farm irrigation, automatic car washing etc.
I/O	Type-C, WIFI
Power Supply	External 5V, 2A power adapter for power supply or charging Built-in 3.7V lithium battery
Temperature	Transmitter installation environment temperature: 5~55°C
	Medium temperature measured by transducer: 0°C~60°C
IP Rating	IP54
Transducer Cable	Type-C cable, standard length:1m

MP Series Flow Sensor

Introduction:

The MP Series flow sensor, using Gentos' patented technology, simplifies operation while ensuring quality and improving customer satisfaction. Designed with an integrated clamp-on structure, it quickly installs by clamping onto the pipe and locking with a nylon cable tie, overcoming traditional installation hassles. Featuring WiFi communication, it enables Cloud Data storage, allowing users to access and manage data anytime via mobile or PC.



Flow Velocity	0.03~5.0 m/s
Pipe Size	DN20 ~ DN32
Application	Municipal garden irrigation, building water management, residential water management, collective dormitory water management, monitoring and control of water production equipment, aquaculture, farm irrigation, automatic car washing etc.
Pipe Material	Carbon steel/ Stainless Steel/ Copper/ PVC (one pipe type for DN20~DN32)
I/O	Type-C, WIFI
Power Supply	Externally Connected with 5V, 1A power adapter Built-in 3.7V lithium battery (optional)
Temperature	Transmitter installation ambient temperature: Class A, 5~55°C The temperature of the medium measured by the sensor: 0°C~60°C
IP Rating	IP54
Transducer Cable	Type-C cable, length 1m

MP LoRaWAN Series Flow Sensor



LoRaWAN
communication

Introduction:

MP LoRaWAN series flow sensors adopt LoRa wireless communication technology and support LoRaWAN protocol. They have the advantages of low power consumption, long distance, and strong penetration. It uses the transit time method, combined with Gentos' ultrasonic flow algorithm, to accurately measure fluid flow in pipelines. With the integrated clip-on design, users only need to clamp the sensor on the pipe, secure it with a nylon tie, and the installation is complete. This streamlined approach eliminates complex installation procedures and minimizes on-site difficulties and constraints.



Flow Velocity	0.03~5.0 m/s
Pipe Size	DN20 ~ DN32
Application	Municipal garden irrigation, building water management, residential water management, collective dormitory water management, monitoring and control of water production equipment, aquaculture, farm irrigation, automatic car washing etc.
Pipe Material	Carbon steel/ Stainless Steel/ Copper/ PVC (According to the user's model selection, the model has been determined at the time of delivery.) (one pipe type for DN20~DN32)
I/O	Input: Type-C (Power Supply, Charge, Serial Communication) Output: Type - C (Serial Communication) LoRa (LoRaWAN) is available
Power Supply	Built-in two 3.7V (760mAH) batteries, fully charged for 6~9 hours Externally Connected with 5V/2A power adapter for power or charge
Temperature	Transmitter: Class A, 5~55℃ Transducer: 0℃~60℃
IP Rating	IP54
Transducer Cable	Type-C, cable length 1m

VC200-W/VC201-W IoT Valve Actuator

Introduction:

With the advancement of microelectronics and computer technology, Gentos took the lead in launching the cloud-controlled IoT valve actuator VC200-W/VC201-W, changing the intelligence of electric valves. With WIFI communication function, users can easily control the valve through the mobile APP, which greatly improves water system management. This innovative product provides technical support for the intelligence of electric valves, improving convenience and efficiency.



WIFI



Mobile APP



Timing Control



Flow Control



Remote Control



IP Rating: IP65

Pipe Size	Copper: DN15, DN20, DN25, DN32 Stainless Steel: DN15, DN20, DN25
Application	Municipal garden irrigation, building water management, household water management, collective dormitory water management, aquaculture, farming irrigation etc.
Applicable Medium	Water
Maximum Power	3W
Output	WiFi
MeterTube APP	Available
Operating Pressure	≤1.0MPa
Controller Operation	Remote control via Meter Tube mobile App
Medium Temperature	≤100°C
Power Supply	DC5V

VC200-R/VC201-R IoT Valve Actuator

Introduction:

With the advancement of microelectronics and computing, Gentos introduced the innovative cloud-controlled IoT valve actuator, VC200-R/VC201-R, enabling electric valve intelligence. This product utilizes LoRa wireless technology, supporting LoRaWAN for long-distance transmission and strong penetration. Leveraging cloud servers, users can remotely control the actuator via PCs, significantly enhancing water system management.



Timing Control



Flow Control



Remote Control

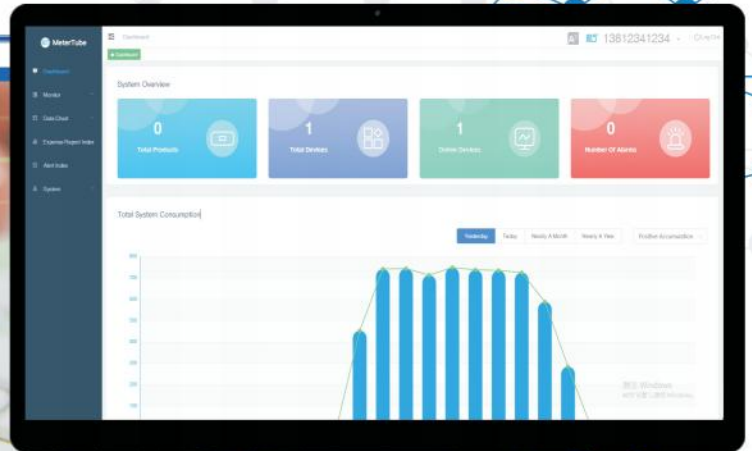


IP Rating: IP65

Pipe Size	Copper: DN15, DN20, DN25, DN32 Stainless Steel: DN15, DN20, DN25
Application	Municipal garden irrigation, building water management, household water management, collective dormitory water management, aquaculture, farming irrigation etc.
Applicable Medium	Water
Maximum Power	3W
LoRa Communication	Support LoRaWAN communication protocol
	Maximum transmit power: 22dBm
	Temperature: -40°C ~85°C
MeterTube APP	Available
Controller Operation	Remote control via Meter Tube mobile App
Medium Temperature	≤100°C
Power Supply	DC5V

MeterTube Platform

A cloud platform for water and thermal energy monitoring and billing



MeterTube Platform Introduction

Model name: MeterTube

Note: Currently, only the latest versions of POE and WiFi flow meters, thermal energy meters, and MP flow sensor are available.



Gentos' *MeterTube* Platform detects unreasonable energy consumption issues in building energy consumption through energy consumption data such as water, electricity, and cooling capacity, optimizes existing equipment, and achieves real-time monitoring, automatic collection, data analysis and management, data reporting, and bill export of flow, flow rate, temperature, and cooling capacity data.

MeterTube mainly consists of monitoring and billing systems, central control management software, mobile applications, and PC applications. It can measure and storage the basic data, and can directly connect to the Gentos' Cloud server through Wi-Fi or POE functions.

Users will have their own accounts to access *MeterTube* through the phone APP or PC Web platform to obtain the statistical data of the meters, such as dynamic flow rate, billing, historical records, and alarms.

This system can be widely used in central vacant spaces such as office buildings, public buildings (hospitals, schools, libraries, etc.), commercial complexes, hotels, etc.

- ◆ Dashboard
- ◆ Monitor
- ◆ Data Chart
- ◆ Expense Report Index
- ◆ Alert Index
- ◆ System



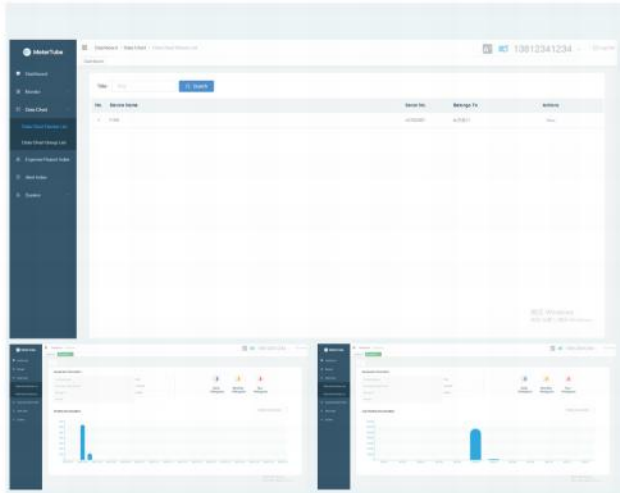
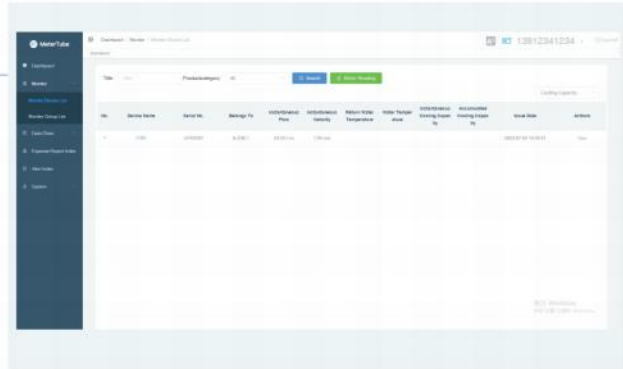
ID:13812341234
Password:12345678

Scan the QR code and experience *MeterTube*!

System Function Introduction

◆ Monitor Device List

View the user's real-time data of all devices, click "Meter Reading" to manually update the data.

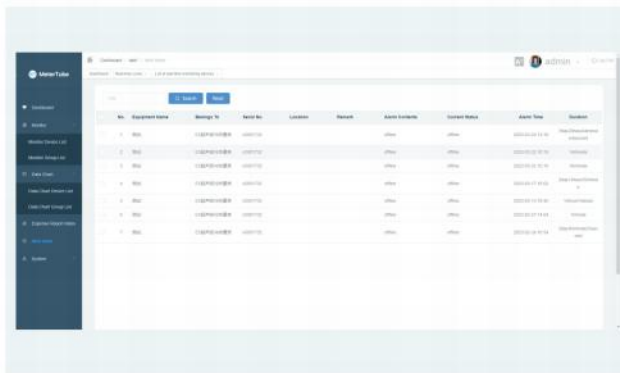
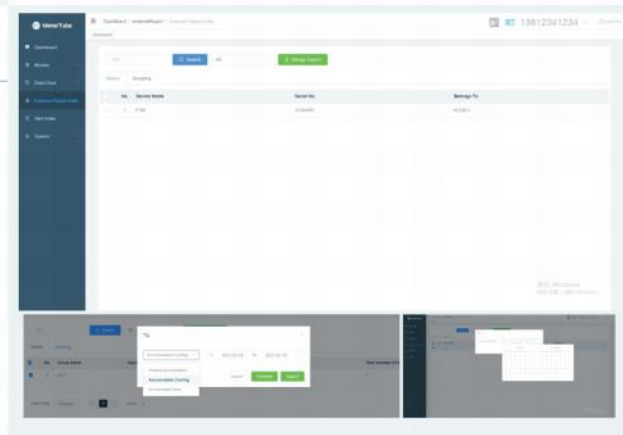


◆ Data Chart Device List

View the daily, monthly, and annual usage and expense histograms of the user equipment and each group.

◆ Expense Report index

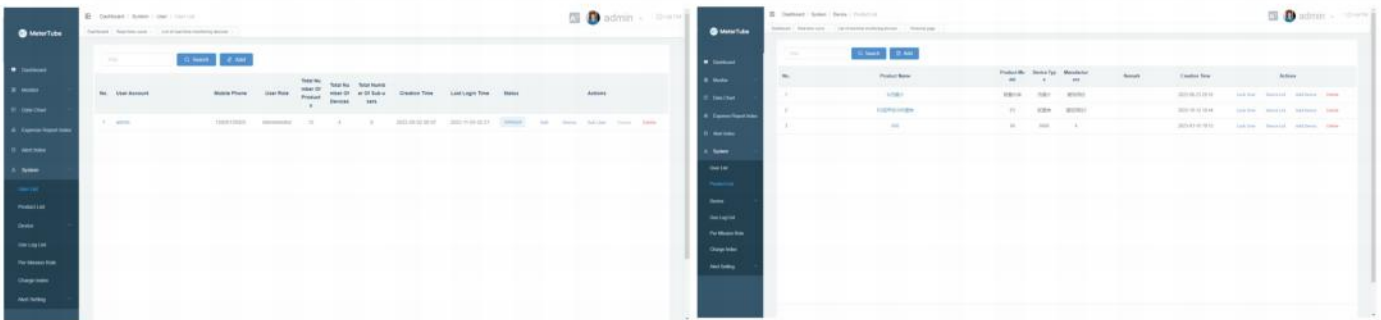
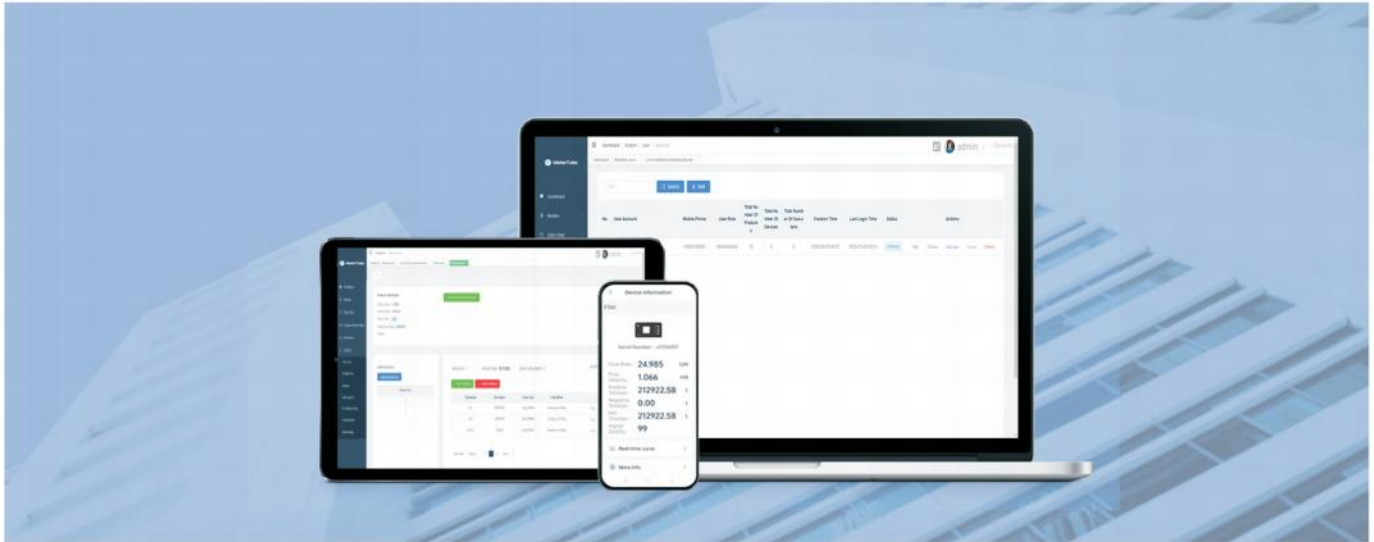
Users can export the cost of water usage, heating and cooling. Devices or groups can be selected for export and preview.



◆ Alert Index

Real-time monitoring of equipment online status, and alarm for equipment disconnection. Trigger the alarm through the alarm rules.

System Management



User List

Ordinary user accounts can create sub-users, divide device data into sub-accounts for viewing; The administrator account can manage all ordinary users and creation of ordinary users; The administrator account is only managed by Gentos.

Product List

Users can add devices, manage devices, sort devices, etc; Device adding process: click "Add" to type the device information, select the corresponding product, device added completed; To view the device upload data format file, click "Information Tracking".

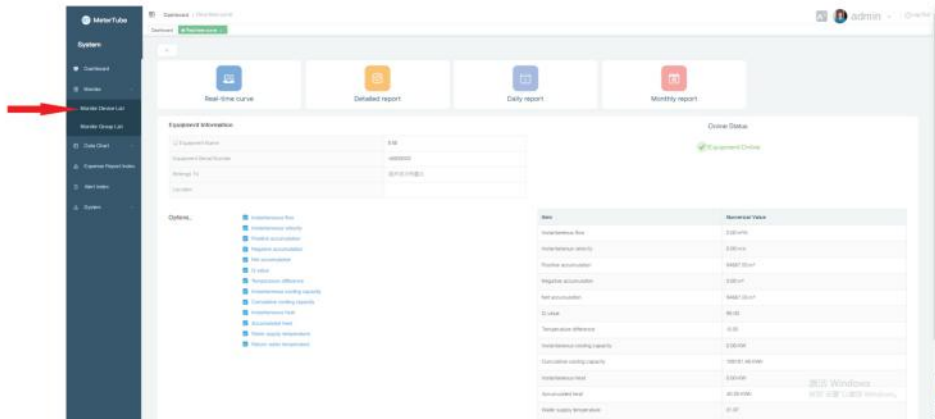
Device

The system comes with two product models (Gentos' flow meter and thermal energy meter), product models can be added, data can be displayed on the system only when new devices are connected to the system.

Per Mission Role

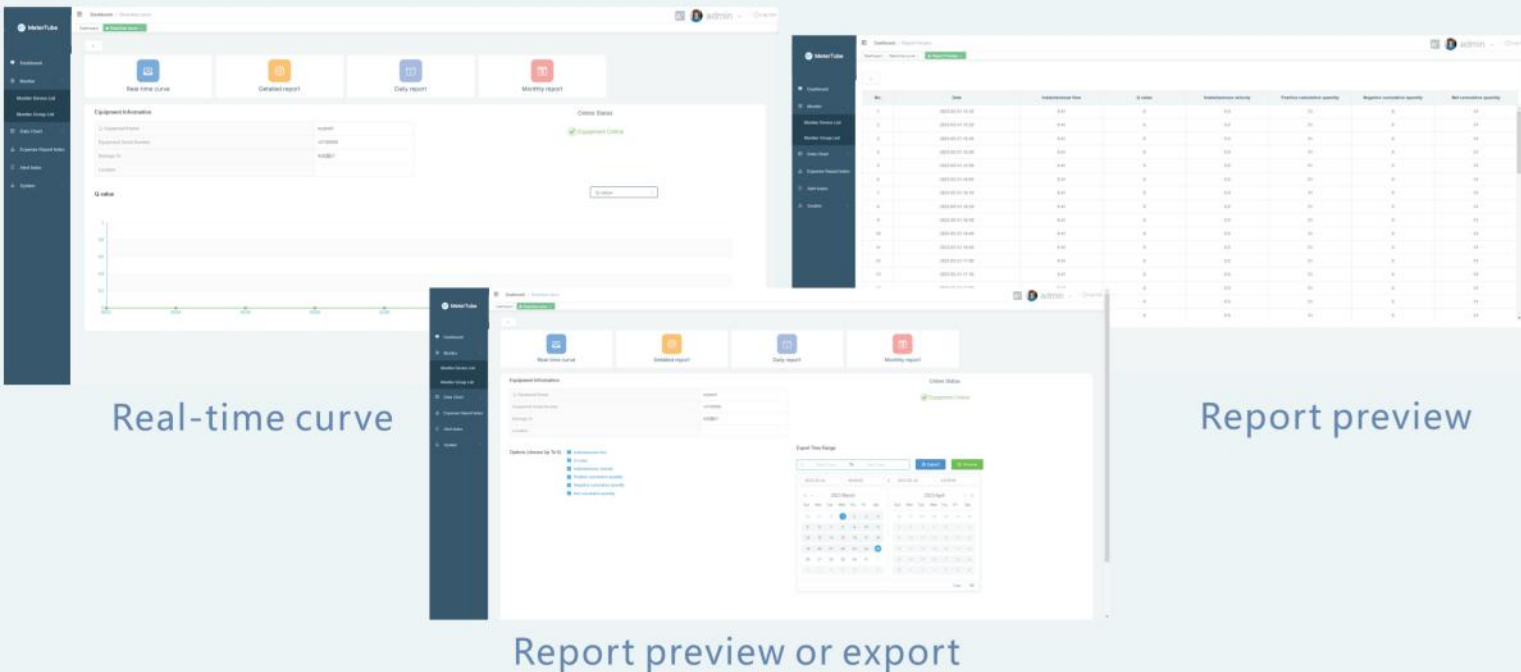
Various roles can be assigned and managed by an administrator account, different roles are based on the functions selected when creating, it can only see the select function; When an administrator account creates a user, select the corresponding role permission to complete the creation.

Interface Introduction



Monitor Device List

Click "View" on the real-time monitoring page to enter the device details, to view equipment information, more measurement data, equipment status, real-time curve and historical data.



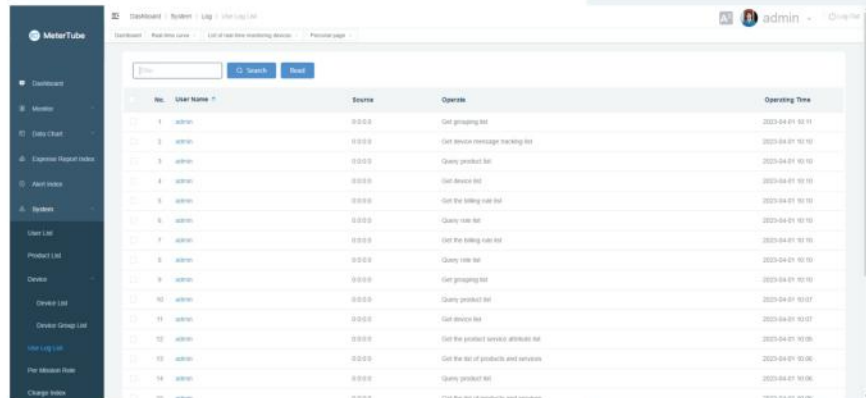
Real-time curve

Report preview

Report preview or export

Use Log List

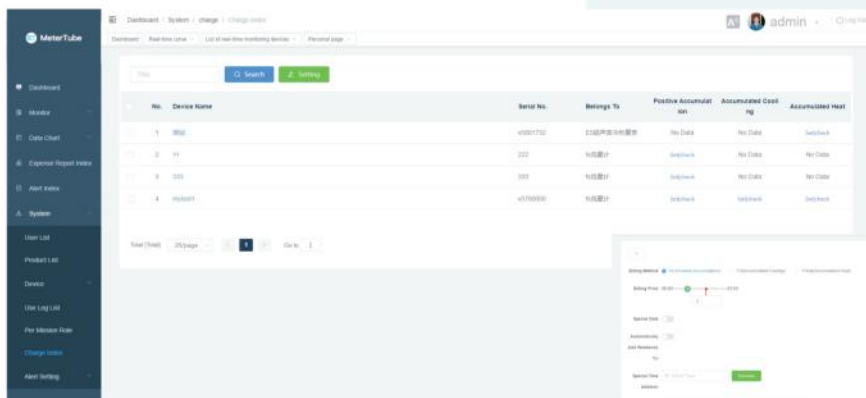
It can view the user's operation record in the system.



No.	User Name	Source	Operate	Operating Time
1	admin	0.0.0.0	Get grouping list	2023-04-01 10:14
2	admin	0.0.0.0	Get device message tracking list	2023-04-01 10:16
3	admin	0.0.0.0	Query product list	2023-04-01 10:16
4	admin	0.0.0.0	Get device list	2023-04-01 10:16
5	admin	0.0.0.0	Get the billing rule list	2023-04-01 10:16
6	admin	0.0.0.0	Query rule list	2023-04-01 10:16
7	admin	0.0.0.0	Get the billing rule list	2023-04-01 10:16
8	admin	0.0.0.0	Query rule list	2023-04-01 10:16
9	admin	0.0.0.0	Get grouping list	2023-04-01 10:16
10	admin	0.0.0.0	Query product list	2023-04-01 10:17
11	admin	0.0.0.0	Get device list	2023-04-01 10:17
12	admin	0.0.0.0	Get the product service address list	2023-04-01 10:18
13	admin	0.0.0.0	Get the list of products and services	2023-04-01 10:18
14	admin	0.0.0.0	Query product list	2023-04-01 10:18
15	admin	0.0.0.0	Get the list of service and services	2023-04-01 10:18

Charge Index

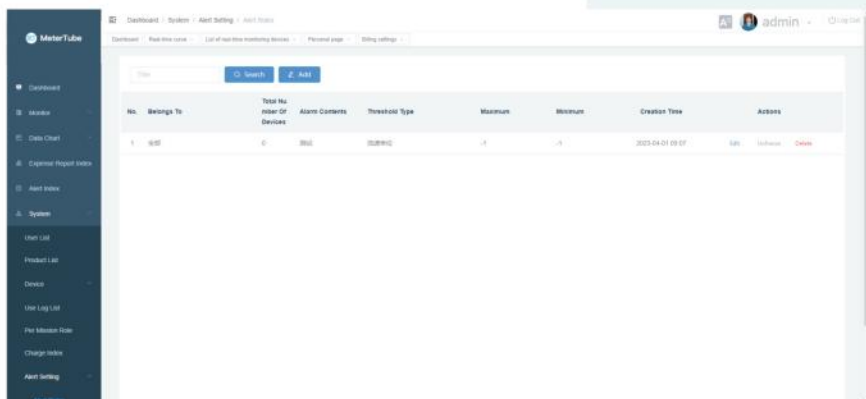
Users can set their own billing rules for water consumption, cooling consumption and heat consumption.



No.	Device Name	Serial No.	Billing To	Positive Accumulated	Accumulated Cost	Accumulated Heat
1	3002	41001712	0200000000000000	No Data	No Data	Setback
2	31	202	0200000000000000	Setback	No Data	No Data
3	3001	105	0200000000000000	Setback	No Data	No Data
4	300001	41000000	0200000000000000	Setback	Setback	Setback

Alert Setting

Users can set rules for the device, such as exceeding the maximum flow value, exceeding the minimum flow value, exceeding the minimum Q value, etc. The measurement parameters are monitored and alarm rules are set.



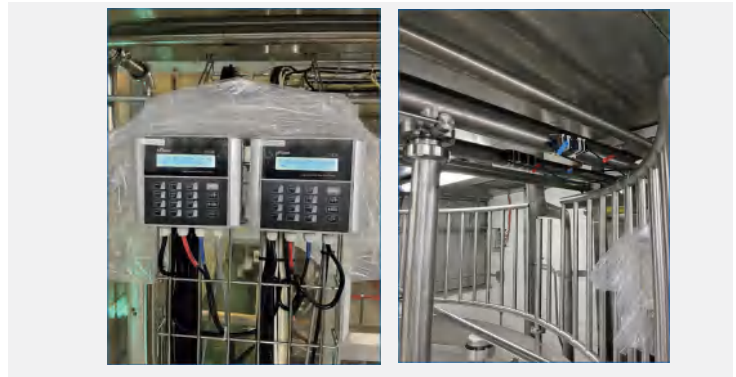
No.	Billing To	Total No. of Devices	Alarm Contents	Threshold Type	Maximum	Minimum	Creation Time	Actions
1	3002	0	3002	0200000000000000	-1	-1	2023-04-01 09:07	Set, Refresh, Delete

Applications



Model: D116
Installation: Clamp-on Method
Application: Flow monitoring for residential water supply

Model: D116
Installation: Clamp-on Method
Application: Pure water flow monitoring for beverage production



Model: D116
Installation: Clamp-on Method
Application: Flow monitoring for Water Supply Station Line

Model: D118
Installation: Clamp-on Method
Application: Flow monitoring for treated water of power plant





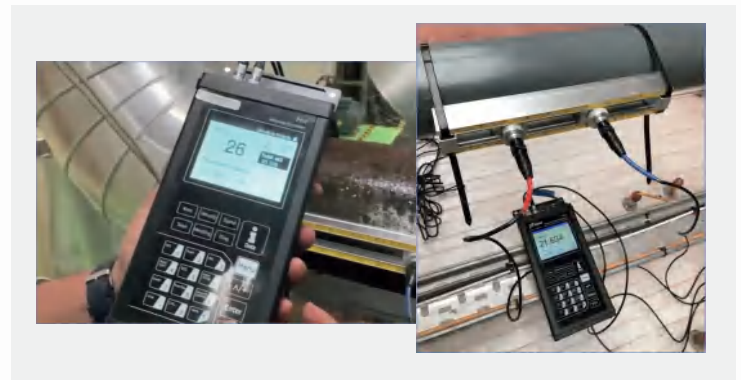
Model: D118

Installation: Insertion Method

Application: Flow monitoring for Water Supply Station Line

Model: P117

Application: Temporary flow monitoring for air conditioning system chilled/cooling water



F3 Series (F3E)

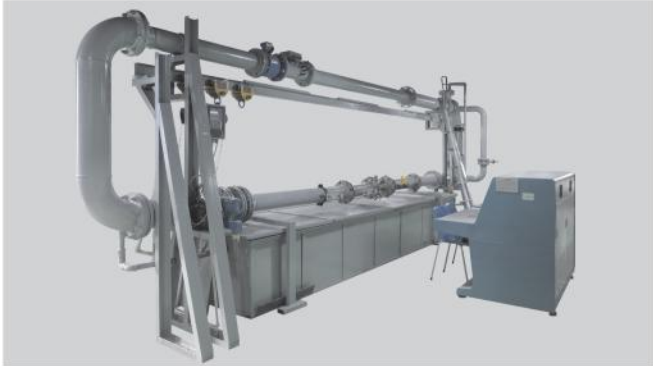
Application: Water flow metering of air conditioning system - chilled water pipe

F3 Series (F3R)

Application: Water flow metering of Building Residential Water supply pipe



CALIBRATION



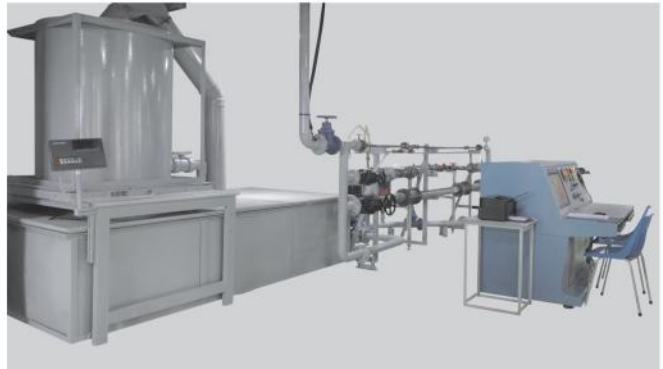
Axial double-loop flow calibration device adopts Krohne high-precision ultrasonic flow meter as a master. System is evaluated and certificated by the National Bureau of Metrology every year.



Heat meter flow calibration system can be used to calibrate the thermal energy meter (BUT meter, heat/cold meter) the measuring medium temperature which can be maintained at $50 \pm 5^\circ\text{C}$.



DN100 axial flow calibration device is mainly used in volume production product calibration, 6 sets flowmeter can be calibrated at the same time.



Liquid Flow calibration device adopts weighing method to calibrate, suitable for flowmeter in DN8 ~ DN80.

HIGH-TEMP AGING WORK

In 55 centigrade high temperature environment at least 72 hours to make the high-temp aging work.



Gentos Measurement & Control Co., Ltd.

Distributor

SCHIBUOLA LAURO

Turin - Italy

www.schibuola.com - info@schibuola.com