QT621 Portable Ultrasonic Flow Meter

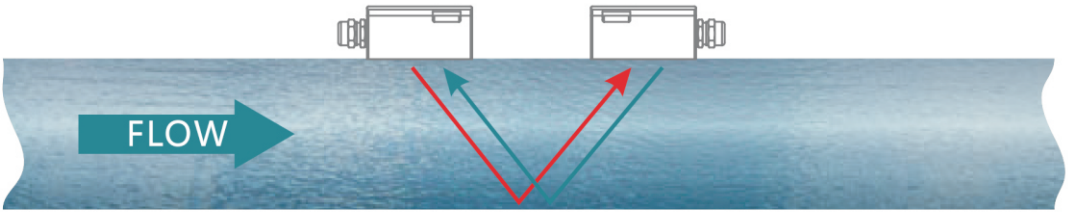
CATALOGUE

Introduction

QT621 is a full function portable transit-time ultrasonic flow meter. No matter you want to quickly verify the flow reading of another meter or to data log flow system values over an extended time period, the QT621 meter is the suitable tool. The innovative design includes matched precision transducers and signal processing circuitry to accurately measure the flow of most liquids over a wide range of velocities. Clamp-on transducers create no wear, zero pressure loss, and do not require process interruptions to install them since they are attached to the outside of the pipe. The meter can be easily moved and installed in different pipes and convenient to carry site to site. Its portability makes it an excellent choice for measuring flows throughout the plumbing infrastructure to verify sensor pump and valve performance.

Measuring Principle

Transit time technology utilizes ultrasonic waves transmitted and received through moving liquid. The difference between upstream and downstream transit time can be used to calculate flow and velocity.



An ultrasonic meter equipped with heat flow capabilities measures the rateand quantity of heat delivered or removed from devices such as heat exchangers. By measuring the volumetric flow rate of the heat exchanger liquid, the temperature at the inlet pipe and the temperature at the outlet pipe, the energy usage can be calculated.

Feature

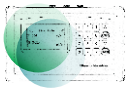
1. Easy to install, reduced installation time and cost.
2. No pressure head loss, No moving parts to maintain or replace.
3. BTU function is an option. QT621 could be used as a portable ultrasonic energy meter.
4. Powerful data storage and also support the data sheet analysis software.

Application

QT621 ultrasonic flowmeter is widely applied in oil industry, water treatment, pure water, chemical and etc.

Specification

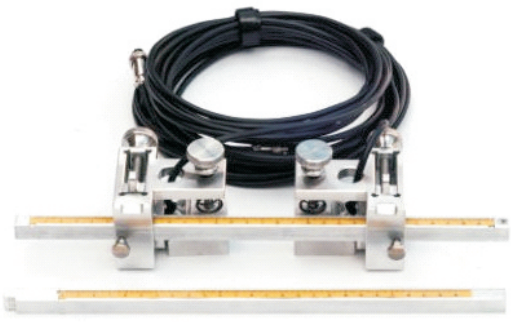
Performance Specifications	
Flow range	±0.03 ft/s ~ ±40 ft/s (±0.01 m/s~ ±12 m/s)
Accuracy	±1% of measured value
Pipe size	Clamp-on: 1"~48"(25mm~1200mm)
Fluid	Single medium liquid
Pipe material	Carbon steel, stainless steel, PVC and other compact material pipe
Function specifications	
Outputs	Analog output: 4~20mA, Max 750 Ω.
	RS485 Modbus
SD card	32G
Interval	1~99999seconds
Key broad	Digital keys
Display	240*128 back lit LCD
Power supply	Rechargeable Lithium Battery Power, 3000mAh (Continuous operation of main battery 16 hours).
Temperature	Transmitter: -40℃~60℃
	Transducer: -40℃~80℃ (-40℃~80℃ is standard; -40℃~130℃ is an option)
Humidity	Up to 99% RH,non-condensing
Physical specifications	
Transmitter	NEMA13, IP54.
Transducer	Encapsulated design, IP68
Transducer cable	Standard cable length: 5m (16ft).



Product Photo

Accessories

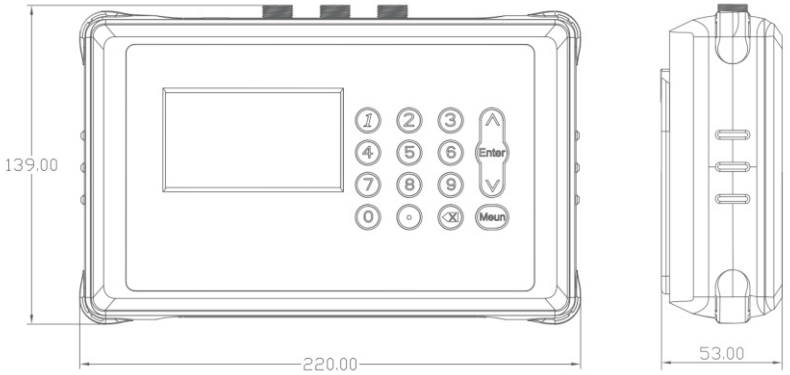
1. Carrying Case*1pc.
2. Transmitter (Electronic)*1pc.
3. Transducer (Sensor) *1 pair.
4. Mounting track*1 set, ST or DT
5. Pipe straps *2 pairs.
6. Coupling compound (Grease)*1 pc, Battery charge*1pc, Output cable*1pc and Tapeline*1



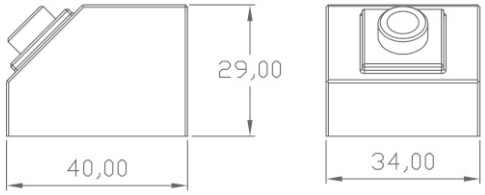
Single guide mounting type bracket（Code ST）

Dual guides mounting type bracket（Code DT）

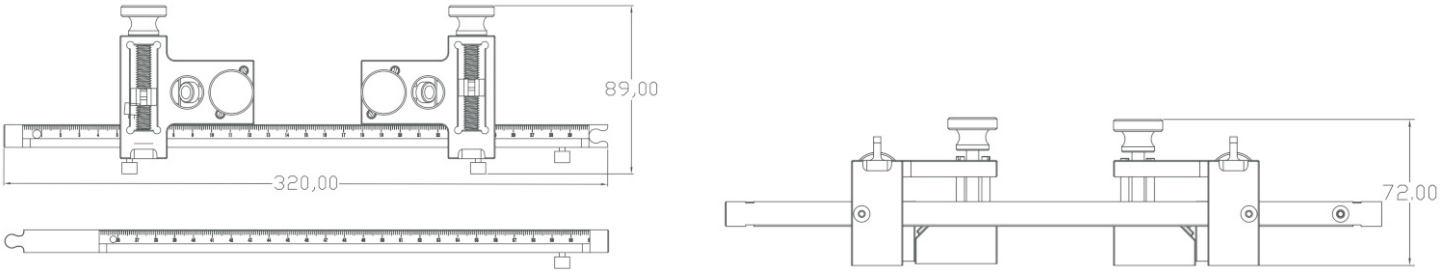
Size



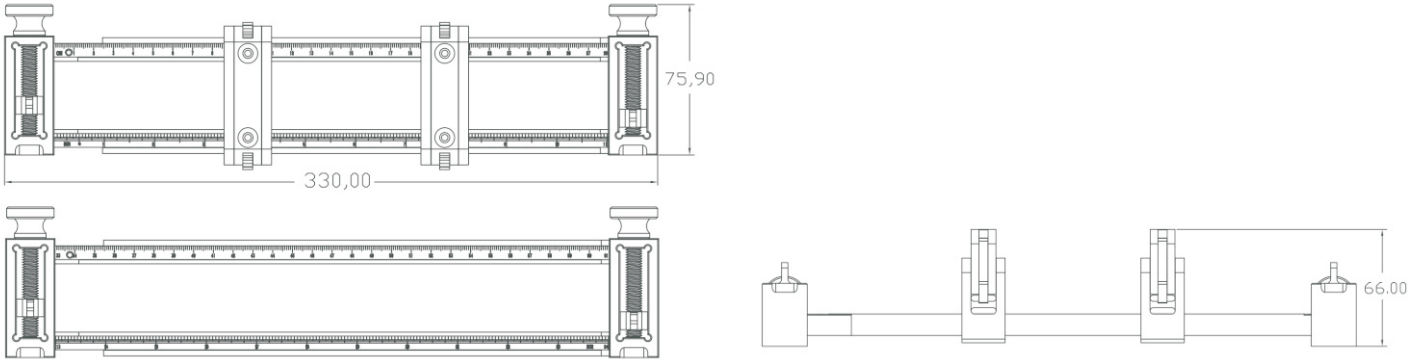
Transmitter size



Transducer size



ST mounting kit size



DT mounting kit size

Measuring Principle

Code		X	X	X	X	X
QT621	Portable Ultrasonic Flow Meter Installation method: Handheld Flow Range:±0.03ft/s ~ ±40ft/s (±0.01m/s~ ±12m/s) Accuracy: ±1% of measured value Repeatability: 0.2% Output: 4-20mA, RS485 Internal lithium power supply: 3000mAh Pipe size range: 1″~48″(25mm~1200mm) Transducer: IP68, D series transducer, 5m cable with mounting kits.					
Type of Transmitter	Ultrasonic Flow Meter	1				
	Ultrasonic Energy/Btu Meter function(RTD)	2				
Type of transducers	Clamp-on, IP68. Operating temperature: -40℉~+176℉(-40℃~+80℃)		D1			
	Clamp-on, IP68. Operating temperature: -40℉~+266℉(-40℃~+130℃)		D1U			
Type of mounting track	Single guide mounting type bracket			ST		
	Dual guides mounting type bracket			DT		
Transducers cable length	D series type of cable Standard 5m (16ft) with mounting track				P5	
	XX is the length you need for cables, Maximum lengthen to 30m				PXX	
Temperature sensor	A pair of clamp on PT1000 sensor 9m					PT1000

Flow meter model (example):
QT621-1-D1-ST-P5
Portable Ultrasonic Flow Meter QT621, D1 type transducer 5m cables with single guide mounting track.

Energy/ Btu meter model(example):
QT621-2-D1-ST-P5-PT1000
Portable Ultrasonic Energy/Btu Meter QT621, D1 type transducer 5m cables with single guide type mounting track. A pair of PT1000 clamp on temperature sensor, 9m cables.

***You could choose the mounting track as the application need and your use habit.**