

## MFU-6000 Handheld Ultrasonic Flow Meter



**Package includes:**

- Main unit
- RS232
- User's manual
- M2 Transducers
- 5m Chains
- 5m Signal wires
- Battery charger
- Ruler
- Intermediate Gel
- Hard carrying case

**Overview:**

MFU-6000 is designed to measure the fluid velocity of liquid flowing within a closed conduit. The transducers are clamp-on type, which will provide benefits of non-destructive operation and easy installation. The flow meter operates by frequently transmitting and receiving a frequency modulated burst of sound (ultrasonic) wave between the two transducers and by measuring the differential time of send and receive of the ultrasonic pulses determines velocity of liquid in the pipe.

The light weight, user friendly operation, high accuracy and outstanding reliability, quick response time, flexibility of usage, data-logger and being PC compatible makes MFU-6000 an ideal device for petrochemical plants, water pipelines, etc.

Marmonix MFU-6000 employs a patent balanced lower voltage multi-pulse igniting circuit which increases the anti-interference ability magnificently so that the flow meter will work properly even in demanding industrial environments such as those with power frequency transverter working nearby.

**Features:**

- Easy to install and no need to cut off the flow, no pressure loss
- 32K BIT built-in data storage
- LCD displays the instant flow, total flow, flow velocity and working conditions
- Measurement range from DN15~DN6000mm
- 4 flow totalizers (0.5 second totalizing period)
- 100 Picosecond resolution of time measurement
- Buzzer and OCT alarm
- Different flow rate units available
- self-adapting signal receiving circuits to avoid any especial adjustments
- Indicating the flow direction
- Zero point adjustment
- Self-diagnosis function can indicate the current working statuses
- Suitable for wide variety of pipe materials and liquids



Parameter	Values
Velocity range	±32 m/s
Accuracy	±1% of reading at rates>0.2 mps
Repeatability	0.2%
Linearity	0.5%
Response Time	0~999 seconds, user-configurable
Pipe Size	DN15~DN6000
Rate Units	Meter, Feet, Cubic Meter, Liter, Cubic Feet, USA Gallon, Imperial Gallon, Oil Barrel, USA Liquid Barrel, Imperial Liquid Barrel, Million USA Gallons. User configurable
Totalizer	7-digit totals for net, positive and negative flow respectively
Liquid	Virtually all liquids that can spread sonic (without solid suspensions). Including: Water, Sea water, Oil, Acids, Alcohol, Gasoline, Propane at -54℃, Butane at -0.5℃, Crude oil, Kerosene, etc.
Suspension concentration	<10000 ppm, (may contain very small amount of air bubbles)
Pipe material	All fine conductors of ultrasonic waves. Including: Iron, Steel, PVC, Carbon steel, Stainless steel, Cast iron, Ductile iron, Copper, Aluminum, Fiberglass, etc.
Security	Setup values Modification Lockout. Access code needs for unlocking
Display	4x16 English letters
Communication Interface	RS-232C (FUJI extended protocol)
Data Logger	Built-in data logger can store over 2000 lines of data
Manual Totalizer	7-digit press-key-to-go totalizer for calibration
Housing Material	Flame retardant ABS
Working environment (Transmitter)	-20~60℃, 85%RH, IP65
Working environment (Transducers)	-30~160℃, IP65
Power supply	3 AAA Ni-H built-in batteries. When fully recharged it will last over 10 hours of operation (input 100-240 VAC)
Weight	514g (1.2 lbs) with batteries
Dimensions	200x92x32mm

### Optional parts

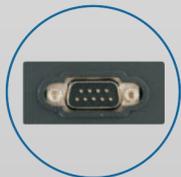
Type	Picture	Size	Model No.	Measuring range	Temperature	Dimensions
Standard Clamp on transducers		Small	S2	DN15~DN100	-30~90℃	45×25×32mm
		Medium	M2	DN50~DN700	-30~90℃	64×39×44mm
		Large	L2	DN300~DN6000	-30~90℃	97×54×53mm
High temp Clamp on transducers		Small	S2H	DN15~DN100	-30~160℃	45×25×32mm
		Medium	M2H	DN50~DN700	-30~160℃	64×39×44mm
		Large	L2H	DN300~DN6000	-30~160℃	97×54×53mm
Standard Bracket type		Small	S2B	DN15~DN100	-30~90℃	318×59×85mm
		Medium	M2B	DN100~DN300	-30~90℃	568×59×85mm
		Large	L2B	DN300~DN700	-30~90℃	188×59×49mm
High temp Bracket type		Small	S2BH	DN15~DN100	-30~160℃	318×59×110mm
		Medium	M2BH	DN100~DN300	-30~160℃	568×59×110mm
		Large	L2BH	DN300~DN700	-30~160℃	188×59×49mm



### The main components features:



Transducer interface



Communication interface

• 32Kbit data storage



LCD display

Sight size: 85\*19mm  
LCD display  
2\*20 english English letter



High strength protective case

Easy to carry,  
dust proof, water proof,  
impact resistance



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• Optional accessories