

# Portable Ultrasonic Flow Meter

## Model: MDUF P100

### Applications

- Oil industry
- Water treatment
- Pure water
- Chemical and etc
- Check system meters
- Midstream and down stream(pipelines and refineries)
- Energy sector (e.g. HVAC, geothermal, power plants)



### Special features

- Easy to install, reduced installation time and cost
- No pressure head loss, No moving parts to maintain or replace
- BTU function is an option. MDUF P100 could be used as a portable ultrasonic energy meter.
- Powerful data storage and also support the data sheet analysis software
- Support 1" to 48" and temperature -40 to 130°C

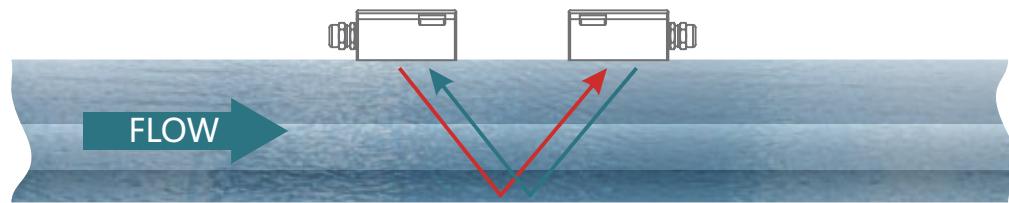


### Description

■ <b>Accuracy class</b>	1% of measured value
■ <b>Flow rate</b>	$\pm 0.03 \text{ ft/d} \sim \pm 40 \text{ ft/s}$ ( $\pm 0.01 \text{ m/s} \sim \pm 12 \text{ m/s}$ )
■ <b>Pipe size</b>	Clamp-on: 1"~48" (25mm~1200mm)
■ <b>Fluid</b>	Single medium liquid
■ <b>Pipe material</b>	Carbon steel, stainless steel, PVC and other compact material pipe
■ <b>Outputs</b>	Analog output: 4~20mA, Max 750Ω, Modbus
■ <b>SD card</b>	16G
■ <b>Interval</b>	1~99999 seconds
■ <b>Display</b>	240*128 back light LCD
■ <b>Key board</b>	Digital keys
■ <b>Humidity</b>	Up to 99% RH, non-condensing
■ <b>Temperature</b>	Transmitter: -40°C ~ 60°C Transducer: -40°C ~ 80°C (-40°C ~ 130°C is an option)
■ <b>Power supply</b>	Rechargeable Lithium Battery Power, 3000mAh (Continuous operation of main battery 16 hours).
■ <b>Transmitter</b>	NEMA13, IP54
■ <b>Transducer</b>	Encapsulated design, IP68
■ <b>Transducer cable</b>	Standard cable length: (16ft)

## Measuring principle

Transfer time technical means the ultrasonic signal from the transducer 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.



An ultrasonic meter equipped with heat flow capabilities measures the rate and 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.





## MDUF P100 Portable Ultrasonic Flow Meter

ORDERING CODE	Example: <b>MDUF P100</b>	UL	SL	AC	U	PS	CL	M	1	S	T	AT	Note
Type of Transmitter													
UL - Ultrasonic flow meter		UL											
UT - Ultrasonic energy /Btu meter function (RTD)													
Flow Range													
SL - $\pm 0.03$ ft/d ~ $\pm 40$ ft/s ( $+0.01$ m/s ~ $\pm 12$ m/s)		SL											
Accuracy				AC									
AC - 1%													
Out Put													
N - Not required only totalizer													
U - 4 ~ 20 mA, Frequency / pulse					U								
M - Modbus RS485													
C - Customer													
Pipe Size						PS							
PS - 1" ~ 48" (25mm ~ 1200mm)													
Type of Transducers							CL						
CL - Clamp-on, Ip68 / (-40 ~ 80°C)								CL					
CU - Clamp-on, Ip68 / (-40 ~ 130°C)													
CW - Insertion, Ip68 / (-40 ~ 130°C)													
Digital Communication													
N - No Communication													
M - Modbus RS485								M					
H - Hart													
F - Foundation fieldbus													
P - Profibus DP/PA													
Mounting Bracket									1				
1 - Single guide mounting type bracket													
2 - Dual guide mounting type bracket													
Transducers cable length										S			
S - Cable standard 5m													
C - Customer maximum length to 30m													
Temperature Sensor													
T - PT1000 sensor 9m										T			
Options													
CC - Calibration certificate													
AT - ATEX											AT		
WA - One year warranty													
Other													





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