

PORTABLE ULTRASONIC FLOWMETER

DUS-P 1.0



PRISMA
Instruments



For all clear, non-diphasic liquids

All types of pipes from DN20 to DN1200

Measurement accuracy 1 % F.S.

Communications : 4~20 mA & RS485 Modbus

Programmable data logger

16 GB SD card & USB card reader

16 hours battery life

Non-invasive transducers Stainless steel IP68

Mounting rails for optimal measurement

Energy metering available in option

DESCRIPTION

Our **DUS-P 1.0** transit-time ultrasonic handheld flowmeter uses the transit-time principle and MultiPulse technology. It allows non-invasive measurement within 1% accuracy.

Compact & communicative, it is equipped with a programmable data logger that allows easy on-site measurement and reporting.

Designed for measuring clean liquids, it allows reliable and accurate measurements on moderately loaded liquids (turbidity <10000 ppm). Equipped with transducers that can fit any pipe from DN20 to DN1200 that are also IP68 rated and can be immersed into water, the instrument is perfectly fitted for harsh environments.

The DUS-P 1.0 flowmeter is user-friendly, thanks to its large screen, an intuitive and ergonomic menu, it will greatly facilitate your on-site interventions!

APPLICATIONS

- Waters (hot & cooling water, drinking water, sea water, etc.)
- Oil-based fluids
- Chemical products, alcohol, detergents, acids etc.
- Food & pharmaceutical beverages
- Pre-treated wastewaters, etc
- Power plants (nuclear, thermal and hydroelectric)
- Metallurgy and mining applications
- Pipe leak detection, inspection, monitoring and collection



SPECIFICATIONS

Models	DUS-P 1.0 TT : Flowmeter DUS-P 1.0 CC : Energy & Flowmeter
Fluid	Any clear non-diphasic liquid that can transmit ultrasound (max. 2% of particles in suspension)
Measuring range	$\pm 0,01 \sim \pm 12$ m/s
Accuracy	$\pm 1\%$ of reading
Repeatability	0,3%
Linearity	$\pm 0,5\%$
Pipe size	20 ~ 1200 mm / 0,8" ~ 48"
Pipe material	Carbon steel, stainless steel, PVC, cast iron, brass, copper other compact material pipes...
Ouputs & Communications	4 ~ 20mA, max 750 Ω RS485 Modbus
Data Logger	Storage: 16 Go SD Interval: 1 ~ 9999 seconds
Power Supply	Rechargeable lithium battery 3000 mAh 16 hours autonomy in continuous operation
Keypad	Touch keys
Display	Backlit LCD screen 240*128
Temperature	Transmitter: -10 °C ~ 50 °C Standard TTansducers: -40 °C ~ 80 °C High temperature transducers : -40 °C ~ 130 °C optional Very high temperature transducers: -40°C ~180°C optional
Humidity	0 to 99% HR, without condensation
Transmitter material	NEMA13 (IP54)
Transducers	TT02 : -40 °C ~ 80 °C standard TT03 : -40 °C ~ 130 °C optional TT02H : -40 °C ~ 180 °C optional Encapsulated IP68 design Suited for DN 20 mm to DN 1200 mm pipes Mounting rails with strip and clamps Standard cable length: 5 meters (others in option)
Energy metering option DUS-T-P 1.0 CC	PT1000 : x2 non-intrusive temperature probes, 9m (others optional) Encapsulated IP68 design Heat and cooling energy measurement

PACKING LIST

1x Portable Ultrasonic Flowmeter DUS-P 1.0

2x IP68 Transducers

1x Mounting rails with strip

2x Fixing chains

2x 5 meters connection cable

1x Integrated Data Logger

1x SD Card 16G + USB card reader

1x 4~20 mA & RS485 Modbus RTU Output

1x AAA Ni-H 1 Battery + Charger

1x Gel tube for ultrasound

1x Carrying case

1x User manual

Energy meter option (when ordered)

2x PT1000 probes, 9 meters

2x 5 meters connection cable

1x Connection interface

