



UDM 200-P/UDM 200-M

Mobile ultrasound flow measuring device

Benefits

- ▶ **Stable measuring precision, even with long measuring cycles**
- ▶ **Flow measurement without supply interruption**
- ▶ **Menu-guided operation**
- ▶ **Ideal for mobile use**

The UDM 200 is a light, portable ultrasound flow measuring device for precise flow measurements in pipes. The measurement is carried out from the outside wall of the pipe and without direct contact with the water column. There is no need to enter the piping system or to interrupt the supply. In this way,

pumps can be easily dimensioned, flow meters checked or zero-consumption measurements carried out in pipe sections. The long battery life and its compactness and robustness make the UDM 200 the ideal companion for the daily work of water suppliers, hydrologists and engineering offices.



Technical Data	
Transmitter	
Principle	Ultrasonic transit time difference correlation, clamp on sensors
Measurable fluids	Hot/cold water and all other acoustical conductive fluids with <10 % gaseous or solid content of volume
Max. pipe diameters	
UDM 200-P	25 ... 1000 mm
UDM 200-M	50 ... 2000 mm
Recommended pipe diameters	
UDM 200-P	25 ... 600 mm
UDM 200-M	50 ... 1500 mm
Flow velocity	0.01 ... 25 m/s
Repeatability	± 0.25% v. MW ± 0.02 m/s
Resolution	0.025 cm/s
Flow measurement	0.3 ... 1.000.000 l/min
Accuracy	± 1 % ... 3 % v. MW ± 0.02 m/s
Signal damping	0 s ... 100 s, adjustable
LCD-Display	2 x 16 character dot matrix (background light)
Interface	RS 232
Process outputs	0/4 ... 20 mA, Impuls/Reed 48 V, 100 mA
Memory of internal data logger	>100,000 values
Battery life	>24 h
Power supply	100 ... 240 VAC, 12 V (optional)
Power consumption	<15 W
Weight	2.9 kg

Dimensions (LxWxH)	230 x 110 x 190 mm
Protection class	IP 67
Operating temperature	-10 °C ... +60 °C
Measuring cycle	100 ... 1000 Hz
Response time	1 s

Measuring functions	
Quantities of measurement	Volume and mass flow rate, flow velocity
Totalizer	Volume, mass of flow
Languages	different languages available

Process outputs	
Current range	(0/4 ... 20) mA
accuracy	0.1 % v. MW 15 ± µA
active output	R _{ext} < 500 Ω
Binary Open Collector	24 V/4 mA
as state output	Limit, sign. Change or error
as pulse output	Value: (0.01 ... 1000) unit Width: (80 ... 1000) ms

Sensors	
Supported diameters	25 ... 1000 mm
Dimensions (LxWxH)	58 x 28 x 31 mm
Material	PEEK /stainless steel
Operating temperature	-20 °C ... +100 °C
Protection class	IP 67