Handheld electromagnetic water flow meter with automatic discharge calculation

- **Usage Type**
  Spot

- **Measurement range**
  Electro-magnetic

- **Parameters measured**
  Flow velocity and water depth

- **Product Highlights**
  Low maintenance magnetic - inductive probe with level measurement for reliable flow measurements. Works well in low flow and turbulent conditions, cross - sections with weed growth and pollution. Applicable in streams and conduits.

- **Rango de medición**
  0 ... 6 m/s

- **Accuracy**
  ± 2% of measured value ± 0.015 m/s (0 ... 3 m/s) and ± 4% of measured value ± 0.015 m/s (3 ... 5 m/s)

The OTT MF Pro is a user-friendly, low maintenance electromagnetic current meter for cost-efficient in-stream discharge measurement.

The OTT MF pro saves time in the field by automatically calculating discharge and its electromagnetic sensor head is maintenance-free, ideal for use in low-flow environments,

and unaffected by large amounts of organic matter.

Velocity measurement	
Measurement method	**Magnetic-inductive**
Measuring range:	**0 ... 6 m/s**

Accuracy	
Accuracy at 0 … 3 m/s	±2 % of meas. value ±0.015 m/s
Accuracy at 0 … 5 m/s	±4 % of meas. value ±0.015 m/s
Zero stability	±0.015 m/s

Resolution	
0.001 at measured value	<10
0.01 at measured value	<100
0.1 at measured value	>100

Depth measurement (option)	
Absolute pressure sensor	with single point calibration
Measuring range:	0 ... 3.05 m
Accuracy:	The larger of ±2% of measured value or ±0.015 m

Methods for velocity measurement	
Streams:	1-,2-,3-,4-,5- and 6-point measurement, ice measurement (1 point and 2 points), surface measurement according to ISO, 2-point measurement according to KREPS
Conduits (canalization):	0.9 x Vmax; 0.2/0.4/0.8; 2D velocity integrating method
Conduit profiles:	Circular, rectangular, trapezoidal, 2/3 egg, inverted 2/3 egg

Methods for discharge	
EN ISO 748	Mid and Mean section method

Power supply	Lithium-ion battery
Lifetime	18 hours typ. (20°C)

Data memory capacity	Up to 10 measuring locations (of 32 vertical profiles each)

Temperature	-20 ... +60°C (operation/storage)

Handheld unit display	

Graphic colour display, transflective	LCD 3.5', QVGA
Handheld unit interface:	USB Mini B type, 5-pin
Export format	TSV (Tab Separated Value) file format

Operating modes	**Real-time velocity measurement, Discharge profile (stream/conduit)**

Noise suppression	**50 Hz, 60 Hz (adjustable)**

Cable lengths	**2 m, 6 m,12 m, and 30 m**

Material	
Sensor housing:	ABS, glass-fiber reinforced
Handheld unit:	Polycarbonate, moulded,by shock-absorbing elastomer (TPE)

Dimensions and weight

Sensor body:	
L x W x H:	11.9 cm x 4.3 cm x 6.3 cm
Weight:	0.5 kg (with 6 m cable)

Handheld unit:	
L x W x H:	21.8 cm x 9.3 cm x 5.3 cm
Weight:	0.68 kg

IP class of protection	
Sensor:	IP68
Handheld unit:	IP67 (USB cap attached)