



# unio<sup>+</sup>

## METER

Online flow monitoring in pipes  
using water meters or sensors

### DESCRIPTION

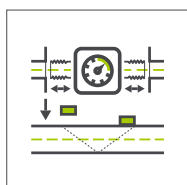
Online monitoring and alarming of flow rates in pipelines of elevated tanks, local networks and in transfer and zone manholes. Complete sets with mechanical or electronic flow meters including mobile data logger with flexible power supply (mains, battery, solar).

### FURTHER PRODUCT INFORMATION



Umfangreiche Informationen zum Produkt finden Sie auf unserer Website und in unserem Online-Shop.

### ADVANTAGES AND FEATURES



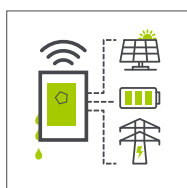
#### Suitable meters and sensors

Mechanical or electronic water meters and sensors, even without intervention in the pipe.



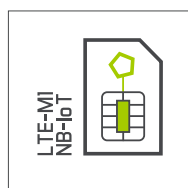
#### Reliable alerting with dynamic alarm thresholds

Configure alarm thresholds remotely and receive alarms via high-priority SMS or email.



#### Flexible power supply and housing shapes

Battery, rechargeable battery, solar or mains operation with matching housings made of plastic, aluminium or stainless steel.



#### Permanent remote data readout

State-of-the-art LTE-M1/NB1 mobile technology and integrated SIM for simple, Europe-wide data connection.



#### Protocols and data forwarding

Automated data logs via PDF or data forwarding to third-party systems (CSV, REST-API, OPC-UA).



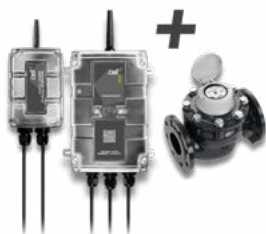
#### Online data access and remote configuration

View measurement data from the field at any time via the online platform using a PC, tablet or smartphone.

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## PRODUKTVARIANTEN



### Water meter

Classic impeller water meter with pulse generator for signal output - suitable for battery operation.



### Ultrasonic water meter

Electronic water meter with no moving parts and high measuring accuracy at low flow rates - suitable for battery operation.



### Inductive flow sensor

Electronic flow sensor with free or reduced cross-section for low pressure loss - suitable for battery, solar or mains operation.



### Ultrasonic clip-on flow sensor

Flow measurement can be retrofitted without interfering with the pipe - suitable for solar or network operation.

## TECHNISCHE ECKDATEN

Flow measurement	Water meter	Ultrasonic water meter	Inductive flow sensor	Ultrasonic clip-on sensor
Sensor interface	Impulse [m³]		Impulse [m³], analog [l/s] or via RS485	
Nominal pipe sizes	DN15 - DN300	DN15 - DN200	DN25 - DN600	DN25 - DN2000
Housing and protection class	unio+: plastic housing 130x250x78mm, IP66/IP68 Optional protective housing made of plastic or stainless steel			
Supply	Optional: Battery 7.2V/94Wh Rechargeable battery 3.75V/51Wh, optionally with solar panel 30W Mains supply with power supply unit, DC protection and buffer battery for power failure detection			
Data transmission	Mobile radio 2G/M1/NB1 or 2G/3G/4G, integrated SIM chip, Bluetooth Low Energy 5.0			
Interfaces	4x universal input digital/analog, 1x RS232, 1x RS485, 1x PT100/1000 Optional: 1x RS485 galvanically isolated, 1x SDI-12			
Internal sensors	Input voltage, SOC (state of charge), battery life in days, mobile phone strength, humidity and temperature in the device			
Sensor supply	2x switchable 3.3V (max. 180mA), 1x switchable 5..24V (max. 1.5W)			
Interfaces	RGB LED, magnetic switch			

For further details, see unio data sheets