

# WATER MONITORING SOLUTIONS

**2021 NEW  
MULTI-SENSORS STATION**

WASTEWATER

INDUSTRY

SURFACE WATER

## BubbleFLO 2

3G / GPRS Portable  
Bubbler flowmeter



- Hydraulic Tables included
- Multifunctional keyboard and display
- Local recording and bi-directional 3G/GPRS communication
- Digital and numeric multi-sensor inputs
- 1 month battery life in bubbler configuration



WINFLUID NG

# HYDREKA

[www.hydreka.com](http://www.hydreka.com)

A **Halma** company

Picture: Sensors pluggable on the BubbleFLO 2

# Applications

The BubbleFLO 2 flowmeter is used for several applications:

- Wastewater network and natural environment diagnosis,
- Wastewater treatment plant self-monitoring,
- Control and regulatory monitoring of urban and industrial wastewater discharge in open channels,
- Any flowmetering applications in specific environment (temperature gradients, fouling, foam...).

# Benefits



Multifunctional keyboard and display



Hydraulic tables included



Recording site configuration



Multi-sensors



Measurement accuracy



Bubbler battery life



External power supply



3G / GPRS data transmission



Robust



Winfluid NG Ecosystem

# Connections

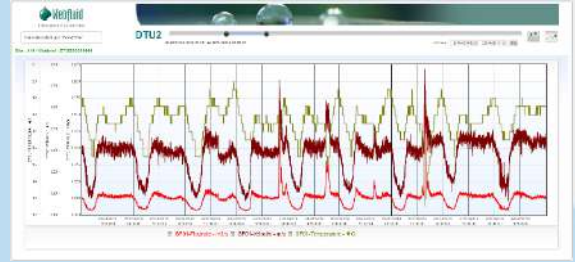


# Data Management

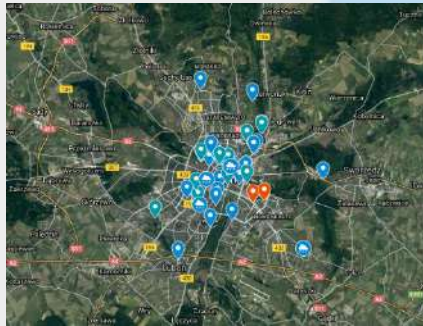
## WEBFLUID NG EXPLOITATING PLATFORM



Global sites



Graphs



Google Map visualization



Sites creation

Alarms



Local recording



SFTP/FTP/FTPS (push & pull) or  
HTTP/HTTPS through API



Hydreka Server

BubbleFLO 2



Customer Server



SCADA

Sampling



# Technical specifications

Main characteristics		
Data Logging	Memory	o 128 Mbyte non-volatile memory o Up to 2 000 000 data points
	Frequency	From 5 seconds to 24 hours (depending on sensors connected)
Power supply	Internal	Lead battery - 12V 7Ah
	Autonomy	1 months (bubbler configuration)
	External	Optional external power supply
Additional inputs		Digital and numeric
Outputs		2 relay outputs
Communication		GPRS/3G communication or local by 2.0 USB cable
Operational	Software	Winfluid NG Ecosystem
	Display and keyboard	Ecran 3,6" display with keyboard (4 multifonction keys)
	Hydraulic tables	Programming by Winfluid NG software
Security		o Secured the local access using authentication through Winfluid NG to unlock the USB access (consult us) o Data secured by FTP/FTPS (push & pull)
Construction		Copolymer polypropylene
Dimensions		305 x 270 x 194 mm
Weight		5,3 kg (with battery)
Immersion		IP65 (suitcase closed)
Warranty		24 months

Sensors - Flowmetering		
Bubbler	Range	0 to 1m
	Accuracy	0,1% FS, temperature compensation
	Rate of bubble	1 bubble / second (depending on water height and compression cycle)
	Calibration	Direct by keyboard
	Purge	Automatic at start-up, every 6 hours and in case of bubbling air tube obstruction
	Tracking speed	o 14 cm/minute in 10 meters tube (4/6mm) o 9 cm/minute in 30 meters tube 4/6mm
	Maximum tube length	30 meters
Ultrasonic	Range	0 to 5 meters
	Accuracy	± 0,5% FS (at 25°C and at less than 2 x death band and liquid surface)
	Death band	0,2m
DVP	Range	Bi-directional 0.01 to 5 m/s o ± 2 % of reading if V ≥ 0.5m/s o ± 0.01 m/s if V < 0.5m/s
	Minimum fluid level	15 mm to 20mm above base of sensor, provided transducers fully wetted
	Temperature measurement	-10 °C to +85 °C, accuracy : ± 0,5 °C
	Others	Overflow shutter Venturi
		Available with following diameter: 150, 200, 250 & 300mm, 53,8° angle Several types available, up to 2500m <sup>3</sup> /h nominal flow

Sensors - Water quality		
pH/ORP	Range	0 – 14pH / ± 1000 mV
	Accuracy	± 0,1 pH / ± 2 mV
	Temperature	Range : 0°C à +50°C, accuracy : ± 0,5 °C
Conductivity/Salinity	Range	From 0 - 200 µS/cm to 200 mS/cm (per decade), automatic - Salinity: 5-60g/kg
	Accuracy	± 1% FS
	Temperature	Range : 0°C à +50°C, accuracy : ± 0,5 °C
Dissolved Oxygen	Range	0 - 20 ppm
	Accuracy	± 0,1 ppm
	Temperature	Range : 0°C à +50°C, accuracy : ± 0,5 °C
Turbidity	Range	0 - 50 to 0 - 4 000 NTU, automatic
	Accuracy	< 5% of the reading value
	Temperature	Range : 0°C à +50°C, accuracy : ± 0,5 °C

Sensors - Common devices		
Rain gauge		Tipping Bucket (0,2mm)
Pulse Meter		Simple, Net/Direction, +/-

Products available for sales and rental. Please contact us for more information.