



**MCERTS MSFM**  
HIGHLY ACCURATE FLOW MONITORING WITH  
MCERTS ACCREDITATION

**MAXIMISE FLOW ACCURACY WITH THE MCERTS MSFM FLOW METER -**  
A HIGHLY ACCURATE ULTRASONIC AREA VELOCITY FLOW METER FOR OPEN CHANNEL MONITORING AND PART FILLED PIPES.

THE **MCERTS MSFM FLOW METER** IS A SELF-CONTAINED, BATTERY-POWERED, INSERTION MULTI-SENSOR MONITOR AND IS **CERTIFIED** TO DELIVER GUARANTEED FLOW MEASUREMENT ACCURACY FOR SITES WHICH REQUIRE VERIFICATION BY **MCERTS INSPECTORS**.

## PORTABLE ULTRASONIC AV FLOW METER WITH MCERTS ACCREDITATION

The **MCERTS MSFM** is accredited by the Environment Agency and is the ideal monitoring system for any business, industry or water company that falls within the Environmental Permitting Regulations (EPR).

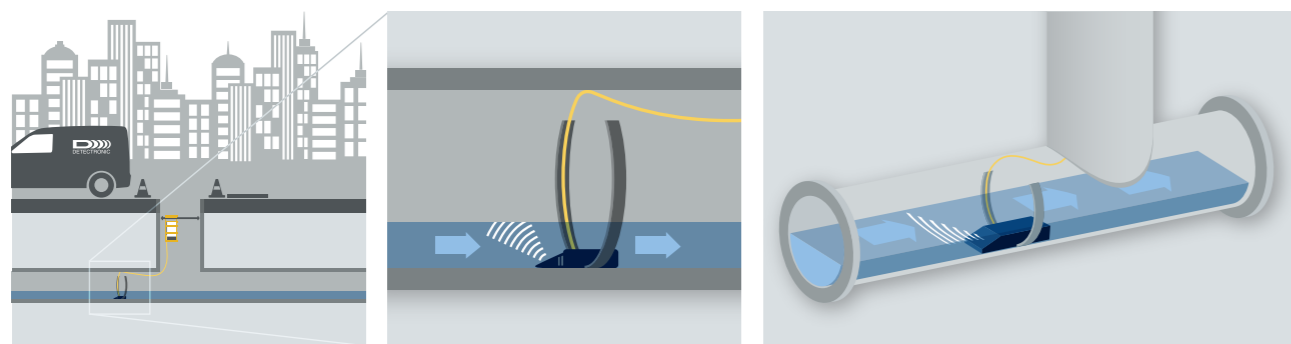
It enables companies to understand exactly what is happening with their agreed consented discharge at any given time and permits water companies to **precisely monitor** pump station emergency overflow and wastewater treatment works final discharge.

It can also be employed in clean water reservoirs.



## MULTI-SENSOR TECHNOLOGY FOR IMPROVED ACCURACY

Using the velocity, depth and temperature to determine the flow rate ensures a **more accurate reading** that doesn't require weirs or flumes and **automatically adapts to changes** in production and intense weather that can affect the flow rates.



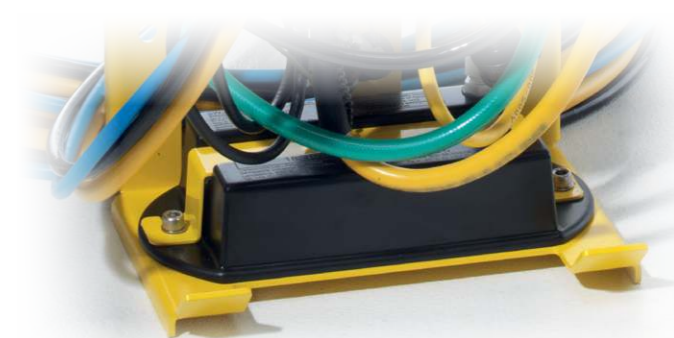
## THE MCERTS MSFM IS IDEAL FOR...



## BATTERY POWERED

The **MCERTS MSFM** is battery-powered, making it perfect for installations that have no mains power available, such as remote sites.

The **MCERTS MSFM** battery has a life expectancy of **5 years**.



## DATA SCREENING

Detectronic's dedicated **DATA CENTRE** monitors your network and uses your data to detect blockages **before** they cause flooding and pollution.

- Real-time data collection and monitoring helps you better understand your sewer network.
- Using human Intelligence means you only receive validated intervention reports.
- Site data, MET office data and local environmental data is integrated for every site.
- Compatible with data from any make of telemetered monitors.





# PRODUCT SPECIFICATION

## VELOCITY SENSOR

Type: dual piezoelectric elements.  
Range: 0.03m/s to 4.00m/s (resolution 1mm/s).  
Linearity:  $\pm 1\%$ .  
Accuracy:  $\pm 2.5\%$  FS  
( $\pm 1\%$  in calibrated range 0.05m/s - 2.00m/s).

## DEPTH SENSOR

Type: hydrostatic pressure.  
Range: 0.0m to 3.5m (resolution 1.0mm).  
Linearity: 0.1% BSL.  
Accuracy:  $\pm 0.2\%$  FS  
( $\pm 0.1\%$  in calibrated range 0.03m - 2.00m).

## TEMPERATURE SENSOR

Type: titanium diaphragm isolated silicon sensor.  
Range:  $-20^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ .  
Accuracy and resolution:  $\pm 0.5^{\circ}\text{C}$ .

## MAIN SENSOR POWER SUPPLY AND OPERATING CAPACITY

Type: 12V ATEX Li-ion rechargeable battery pack.  
Battery life: Full Charge = 30+ weeks  
at 5 minute logging rate.

## MCERTS CERTIFIED RANGE

0 to 30l/s for 197mm channel.  
0 to 20l/s for 152mm pipe.  
0 to 25l/s for 188mm pipe.  
0 to 30l/s for 244mm pipe.  
Certificate number: Sira MC180336/01.

## DATA LOGGER

Memory: solid state 128k-40k per channel  
(rotating store or store until full).  
Recording interval:  
programmable 1 - 60 minutes.  
2G/3G GSM/GPRS communication  
worldwide compatibility.  
Data transmission:  
2G/3G/UMTS GPRS - 15 minutes, hourly, daily,  
weekly, monthly at programmable intervals.  
Logger power supply: 5 years typical life span  
internal lithium battery pack (user replaceable).

## ENVIRONMENTAL

Operating temperature:  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ .  
Protection: IP68/NEMA6P.  
Connectors: IP68 Mil - Spec.  
Dimensions: 530 x 213 x 150 (maximum),  
including battery pack and protection frame.  
Weight: 8.5kg  
(including battery pack, frame, depth and  
velocity sensors with standard 10m cables).



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