



Q-Eye MII, Q-Eye MDS-5, Q-Eye PSC

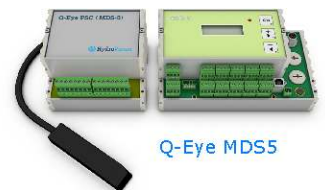
Stationary and mobile discharge measurement with Acoustic Pulse-Spectral-Correlation Technology

Key Features

- Ideal for applications in small streams and canals
- Mobile and stationary solutions
- Measurement with Acoustic Pulse-Spectral-Correlation Technology



Q-Eye MII



Q-Eye MDS5



Q-Eye PSC



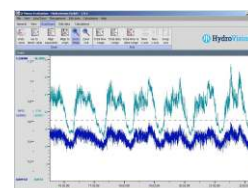
Q-Eye MDS-5 measuring site



Installation (mounting cabinet)



Installation of sensor in tube



Software Q-Vision Evaluation

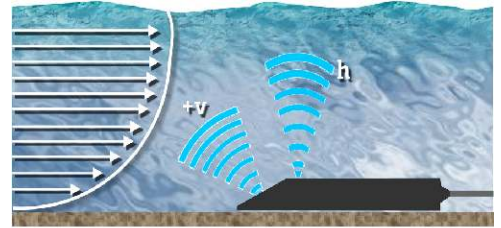


Application in sewage

Measuring principle

Are you looking for a way to measure continuous or temporary discharge in small streams or canals reliably? – No problem with the new sensor for registration of mean velocity and level.

The sensor, which works based on the Acoustic [Pulse-Spectral-Correlation Technology](#) measures flow as well as water level with ultrasound and calculates the discharge with internal algorithms and deposited cross-section profile.



mounting in tube

Mounting of the sensor depends on the given environmental conditions.

However, defined cross-section profiles are ideal (e.g. partially filled tubes, trapezoid canals or rectangular flow channels etc.). Standardized mounting plates ease the fast and uncomplicated installation with typical applications. Of course, mounting solutions on the sole or on the river bank of natural water is possible.

We would be pleased to advise you in detail and to find a practical solution.

Facts

Measuring range v : -5.3 m/s up to +5.3 m/s (bi-directional)

Measuring range h : 0.04 up to 1.3 m with integrated ultrasonic level sensor, expandable with external pressure sensor up to 0-3.5 m

Data storage: 2 MB (Q-Eye MII, Q-Eye MDS-5), 2 GB (Q-Eye PSC)

Data transmission: integrated GSM/GPRS modem as option for Q-Eye MII
external GSM/GPRS modem as option for Q-Eye MDS-5

Q-Eye MII (mobile measurement)

The strength of [Q-Eye MII](#) lies in mobile applications. The long lifetime of approx. 90 days with a measuring interval of 5 minutes, as well as the small and robust housing make it perfect for temporary measurements.

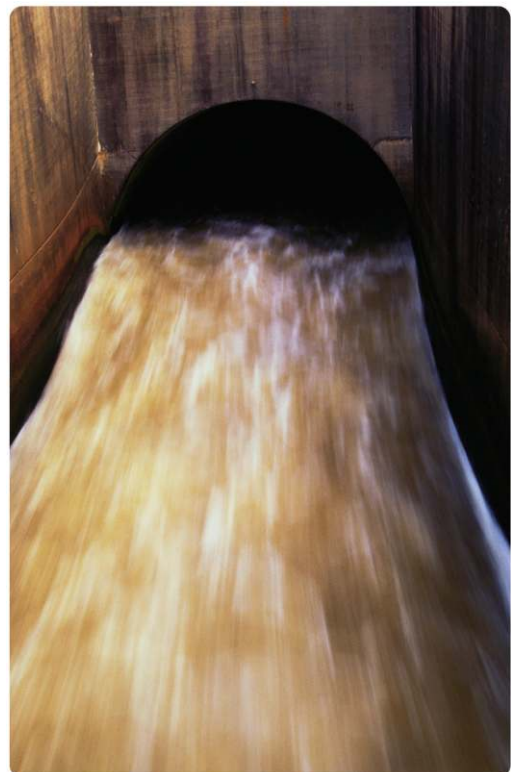
In addition to water level and flow, the quality of signal, battery voltage and calculated velocity are also stored in the data logger.

An impulse output provides the necessary signal to a sampler. With the optional connectable pressure sensor, the water level can be collected redundantly. The measuring range can be upgraded up to 3.5m.

All connection cables are provided with water tight plugs, which makes mounting or changing of battery in field easy.

The display, which is activated with a magnetic switch, shows the active measuring values and informs about the status of the measuring device.

With laptop and Software Q-Vision Setup, or with an HDA all parameters are entered and the measured values are read out.



Q-Eye MDS5 (stationary measurement)

Our discharge measuring system type **Q-Eye MDS5** is composed of two individual hardware components: the ultrasonic Doppler sensor with measuring signal converter "Q-Eye", as well as the reliable SEBA data logger type "MDS-5" for continuous data storage of for example flow, level and battery voltage.

If requested, further digital or analogue sensors (e.g. multi-parameter probe MPS-D3) can be connected. Flow measurements in small streams or canals up to approximately 4-5 m width are the ideal application for our Q-Eye MDS5.

Due to its very low energy consumption this instrument does not need an external power supply! With a measuring interval of 15 minutes in combination with a 100 Ah battery, a durability of > 3 months can be achieved without problems!

Good news also for users who are already working with SEBA MDS data loggers: existing operating and evaluation software WBedien, DEMASvis, DEMASdb or the SEBA HDA can be used continuously without further investments.



Q-Eye PSC (stationary measurement)



In contrast to Q-Eye MDS5, the **Q-Eye PSC** convinces with its configuration.

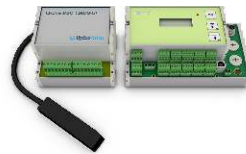
With an output of 4 to 20mA external sensors can be supplied with voltage, read and stored. Not only level and flow, but also parameter for water quality like O₂, conductivity or turbidity can be measured and stored on a Compact Flash Card.

Programming of the system is possible with 5 keys, without further implementation. The simple menu navigation permits fast and safe operation.

All measuring results are shown on a big display with sharp contrast. Up to 4 analogue and freely programmable outputs transmit the measuring results to a process control system.

Additionally, an impulse input is available and 2 relays can be configured for further outputs. Because of the weatherproof protection housing, the system can be installed directly at the measuring site and might additionally be protected from rain and direct solar radiation merely with a simple roof.

Technical Data



	Q-Eye MII	Q-Eye MDS-5	Q-Eye PSC
type	mobile	stationary	stationary
measuring principle	pulse spectral correlation technology		
flow velocity	measuring range: -5.3 m/s up to + 5.3 m/s (bi-directional) measuring accuracy: +/- 1% of measuring value cable length: 10 m (standard), max. 80 m		
water level	measuring range: 0.04 up to 1.3 m with integrated ultrasonic sensor measuring accuracy: +/- 1% of measuring value		
	measuring range: 0 up to 3.5 m with external pressure sensor (option) measuring accuracy: +/- 0.25% of final value		
data storage	2 MB for about 1 million measuring values	500 MB	up to 2 GB Compact Flash
storage interval	> 30 sec freely programmable		
analogue inputs	---	8 * 0-20mV, 0-2V	8 * 0/4 up to 20mA
analogue outputs	---	1 * 4-20mA	4 * 0/4 up to 20mA
digital outputs	1 x Impulse output		1 x Impulse, 2 x Relay
operation	1 key	3 keys	5 keys
display	1 row / 8 characters		4 rows / 20 characters
communication	RS232	USB / RS232 / RS485	RS232 / RS485
emergency current	battery operation 16Ah Alkaline or 10Ah NiMH accumulator	external 6 up to 24 VDC	external 12 VDC or 85-264 VAC (50-60 Hz)
power consumption	< 50 µA (standby) 20 mA (active)	< 1.5 Watt (continuous operation)	< 5 Watt (continuous operation)
operation temperature	0°C up to 60° C		
housing	POM (Polyacetal)	aluminium (for TS35)	aluminium (for wall)
protection class	IP 69K	IP 40	IP 65
dimensions	Ø 16cm, h=29cm	w=28cm, l=11cm, h=7cm	w=26.5cm, l=10.4cm, h=24.1cm
weight	8 kg incl. battery	1.2 kg	8.2 kg
software	Q-Vision Setup		---

The right is reserved to change or amend the foregoing technical specification without prior notice.



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