

# Going **OFFSHORE** FGM3D UW/D



**SENSYS**<sup>®</sup>  
Magnetometers & Survey Solutions

# One Sensor ...



## FGM3D UWD TOWFISH

### APPLICATIONS

- Exploration
- Cable/pipeline search
- Infrastructure monitoring
- UXO/ERW detection
- Object re-location
- High-density spot surveys
- Vessel measuring
- Components/material analysis

### Let's go into the water!

As the RS485 interface of the FGM3D UWD allows for long cable connections, the sensor is ideal for the integration into towed solutions.

Simply load the sensor into the towfish like a cartridge, connect the towfish altimeter and a GPS to the top side unit and you are good to go.

For now, this is a single sensor solution but a **quad sensor solution** will follow soon.

You can record the data with SENSYS software or any other third-party software instead.

The sensor can even send the protocol of the market leading G882 sensor.



### Time to get started

We believe in a lifetime business relationship, in which mutual growth is possible.

# ... as many solutions ...



FGM3D UWD AUV

## KEY FEATURES OF THE FGM3D UWD

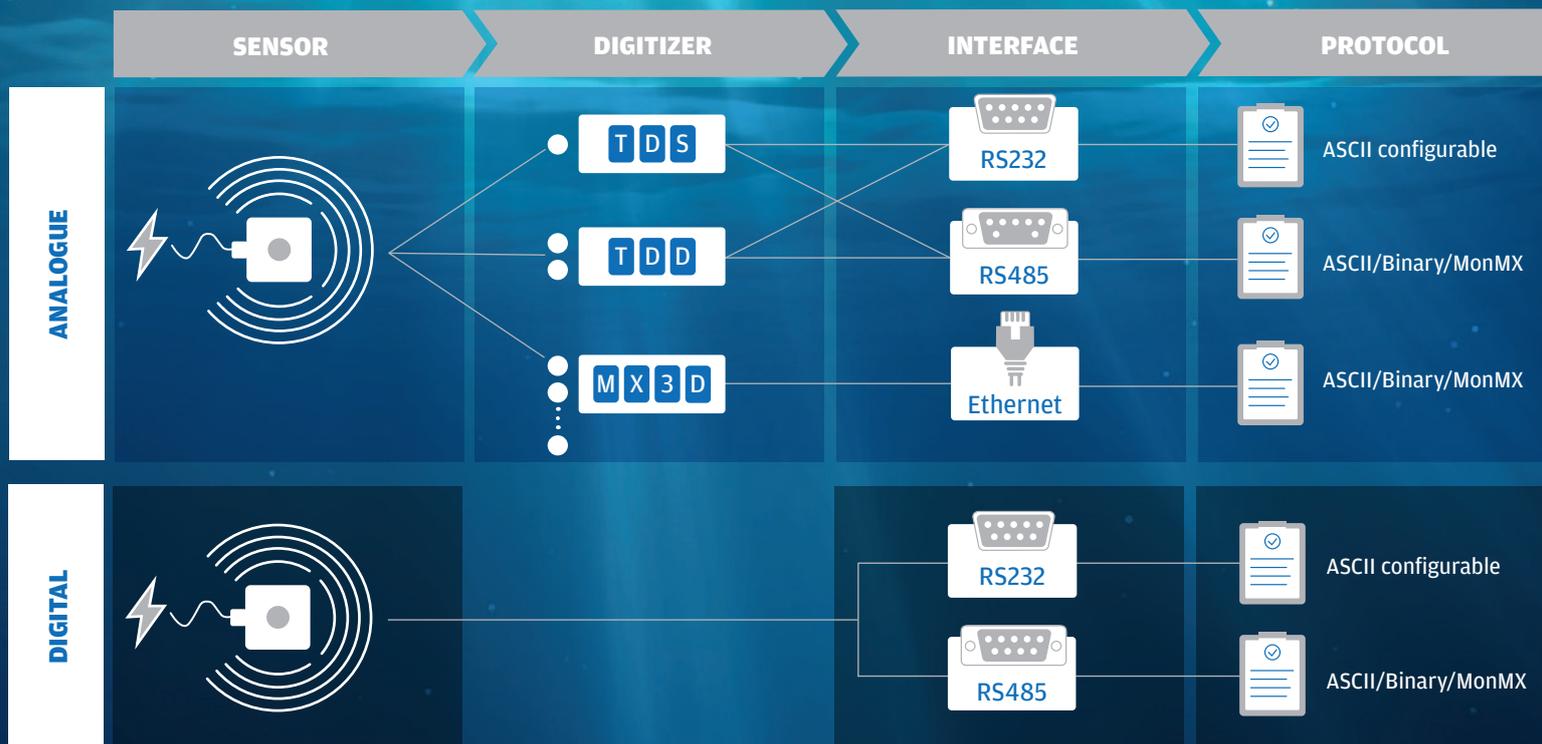
- All in one unit:  
Triaxial Fluxgate Magnetometer, accelerometer and pressure sensor
- Integrated 24 Bit ADC
- RS232/RS485 interface
- Configurable sampling rate up to 6,000 Hz
- Command line operation
- Configurable output

## You prefer AUV solutions?

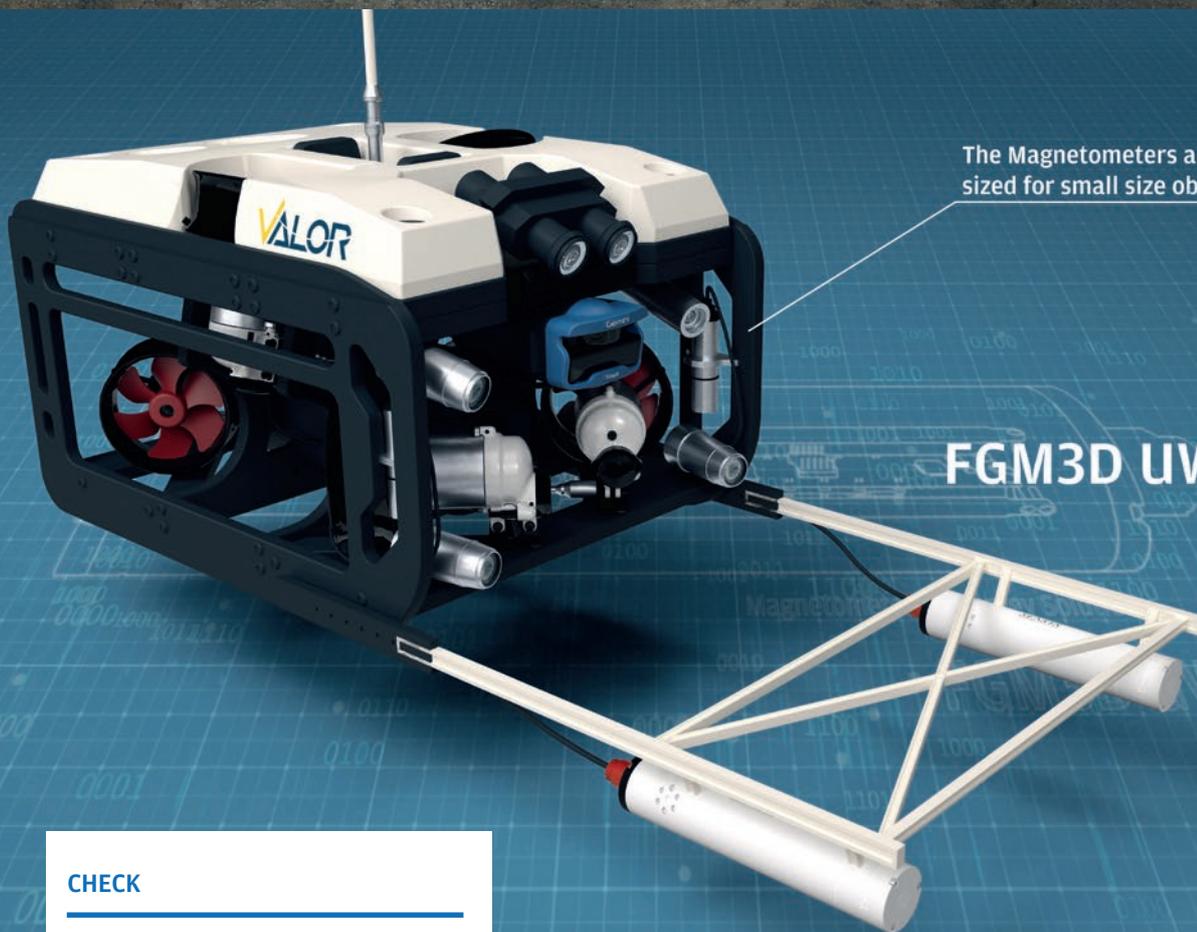
Fine! Just remove the sensor from the towfish and put it into your micro AUV like the Seaber MARVEL or the Evologics Quadroin.

The RS232 interface connects to your embedded computer and records the data while it follows its pre-programmed mission.

You just wait for the AUV to return, fetch the data and process them either in the SENSYS workflow or with whatever you are used to use.



# ... as you can imagine!

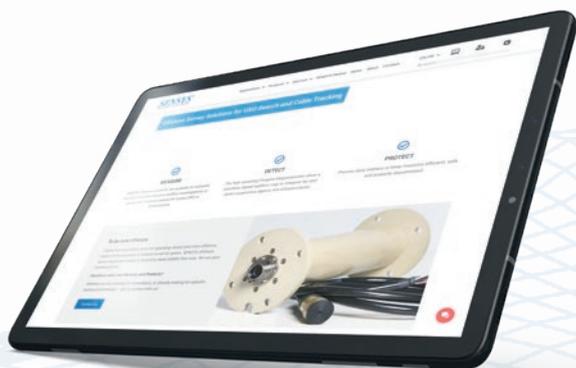


The Magnetometers are perfectly sized for small size observation ROVs

## FGM3D UWD ROV

CHECK

[sensysmagnetometer.com/offshore](https://sensysmagnetometer.com/offshore)



But, the high bandwidth of the sensor and the high sampling rate even allows for mounting the sensor close to sources of interference like an ROV. Connected to RS232 port(s) of your ROV MUX you can just feed the data into the survey software of your choice.

Those compact installation allow for much smaller and also more economical ROVs, but also enables tasks in dense and difficult areas (like harbours, dams, shallow areas) where a large survey system is not manouverable.

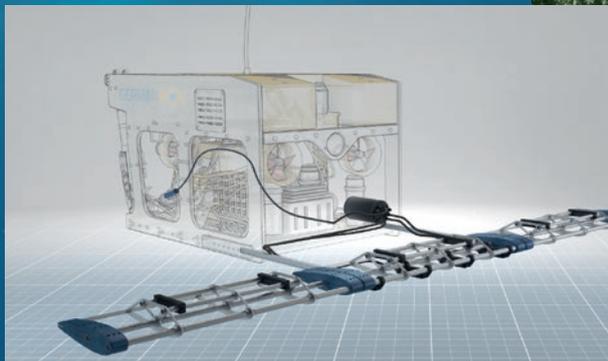
Besides cutting costs of survey equipment on and around the survey vessel, SENSYS solutions also reduce time for surveying and data processing.



# SENSYS<sup>®</sup>

Magnetometers & Survey Solutions

# SENSYS Offshore Portfolio



## Survey solution MX3D UW

SENSYS offers a universal and mobile offshore survey solution consisting of up to 20 submersible analogue triaxial Fluxgate Magnetometers FGM3D UW, the cascadeable 5-channel DAU MX3D and the sensor frame SEA-RACK. Push and tow variants on ROVs allow precise and close seabed ground investigations. Using an additional Magnetometer at the ROVs jetting/dredging tool significantly reduces the time it takes to uncover buried object in the seabed for removal.



## Digital Magnetometer FGM3D UWD

The FGM3D UWD sensor is the digital version of our proven tri-axial Fluxgate magnetometer FGM3D. Having the magnetometer, a tri-axial accelerometer and a pressure sensor in the same unit and a configurable RS232/RS485 based output protocol on top makes this sensor extremely versatile. With a 24-bit ADC and sampling rates of up to 6,000 Hz this sensor is up to any task. Cable connection can be up to 1,000 m long. While the sensor is accepting commands via a terminal session, data can be compensated in real time and parameters like sampling and output data rate can be changed on the fly.

## Ranging Solution MMVA

When it comes to analyzing entire vessels for their magnetic signature (i.e. preventing sea mine attacks by installing Degaussing solutions), SENSYS mobile or stationary ranging systems come into game. With a sensor grid on the seabed, a land side operator unit can record the magnetic data while vessels are ranging above the sensors. The output is a vessel magnetic heatmap to be further used or interpreted with SENSYS or third-party software.



## Single/Twin Digitizer TDS/TDD

Paying into decentralized system components and distributed sensors within vessels or nearshore ranging systems, SENSYS also offers single and dual channel digitizers for their analogue FGM3D Magnetometers. All three sensor components of a single or from two sensors are sampled with up to 1,000 Hz, synchronized, 24 bit digitized and outputted via an RS232 interface. A software is not needed, the unit is operated via command line instructions instead.

# SENSYS®

Magnetometers & Survey Solutions

## Our Mission

### MEASURE. DETECT. PROTECT.

We love what we do. For us, everything revolves around magnetic fields and their measurement in the field and laboratory.

Our measurement solutions are applied in the air, on the ground and in water. If we don't have the right solution for you yet – then a team of experts, developers and specialists is ready to provide you with the support you need to develop your product with us.

For this purpose, we rely on a modular construction kit and the immense experience of 30 years of geophysical measurement procedures and methodologies.

### We are your solution.

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## Our Portfolio



**SPECIALS**



**UXO**



**OFFSHORE**



**ARCHAEOLOGY**



**SENSORS**



**GEOPHYSICS**



**SOFTWARE**



SENSYS was founded in 1990 by Dr.-Ing. Andreas Fischer. With his mission to always serve customers specific needs, the company became one of the leading providers of magnetic and electromagnetic survey systems and components.

SENSYS

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