

TRANSPORT MONITORING

Looking for an easy way to monitor the behavior of your transport and the direct influence to the cargo? The portable unit MOSS could be the solution to your demands.

Not only the GPS location but also other parameters i.e. roll, pitch, motions are logged, monitored and presented on a webserver during the whole transport period.

MOSS INTRODUCTION

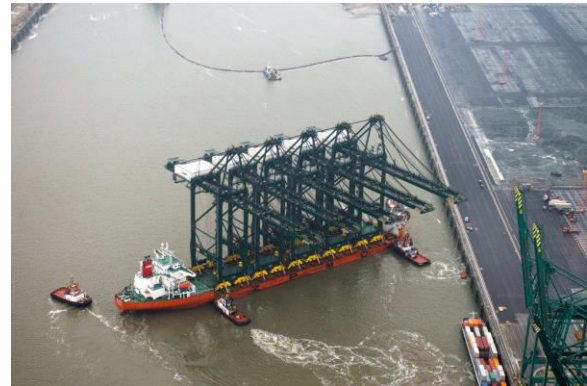
The MOSS is a practical, robust and portable measurement solution with many options to log and monitor different kind of inputs. The system can be applied in harsh environments without any special installation requirements.



MOSS unit (right-top) with motion sensor (left-bottom) and IRIIDIUM unit (left-top)

With the integrated battery system the MOSS can run approximately ten hours stand-alone. With an additional battery unit or external power supply the system can run continuously. Data is stored on an USB stick for easy data transfer. Direct transfer of “snap-shot” data to a webserver by use of an IRIIDIUM unit is possible.

With a setup time of less than one hour, the unit is ideal for normal and fast response projects.



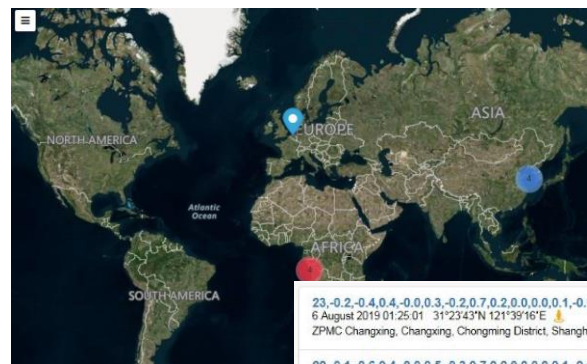
Container cranes on ship, ready for transport.

MOTION SENSOR

The most common motion sensors can be read by the MOSS unit. Standard the serial NMEA outputs are used to get Roll, Pitch and Motion info but other protocols are possible. Depending on size, the motion sensor could also be integrated inside the MOSS unit.

IRIDIUM PRESENTATION

The data from the IRIIDIUM is presented on a webserver with the data on the inbox and visual presentation of the location on a world map. Location updates are at a fixed time interval, selected prior or even during transport.



Top: World map on which track-locations are displayed.

Right: Messages with location and additional data.

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6 August 2019 01:25:01 31°23'43"N 121°39'16"E	
ZPMC Changxing, Changxing, Chongming District, Shanghai, PRC	
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ZPMC Changxing, Changxing, Chongming District, Shanghai, PRC	

MOSS OPTIONS

The MOSS unit is a universal data logger unit for multiple sensor inputs and therefore suitable for many different applications.

Due to its small size and internal battery option it is ideal for (hand-carry) field applications.

Below a brief overview of possible options of the MOSS. If your option is not mentioned please contact TARKA-SYSTEMS for more details.

Protocol options:

- Serial input RS232 (NMEA)
- Serial input RS485 (MODBUS-RTU)
- mA input (0-20mA)(4-20 mA)
- Volt dc (0-10V)
- CAN
- Ethernet
- Digital inputs/outputs
- NTP synchronization

Example of applications:

- Motion measurement
- Depth measurement
- Temperature measurement
- Flow measurement
- Pressure measurement
- Strain gage measurement
- Environmental / wind measurement
- Draft measurement
- Incline measurement
- Wireless data transfer to remote location (ship-ship, ship-shore)

The MOSS is used in different areas like :
Marine, Salvage, Offshore, Civil, others.

See detailed information of the MOSS application at: [MOSS APPLICATIONS](#)

TARKA-SYSTEMS

TARKA-SYSTEMS is an innovative company specialized in the development and production of client-specific measurement and monitoring tools and (portable) data-acquisition systems (hardware and software).

The company TARKA-SYSTEMS was founded by Henry Wijgerse in 2011 after 15 years worldwide field experience and system development for one of the largest maritime research institute in the world (MARIN, The Netherlands).

As a one-stop solution for the client, TARKA-SYSTEMS provides all kind of monitoring systems to a large range of companies, from small portable units to large permanent solutions.

For more information please refer to www.tarka-systems.nl or info@tarka-systems.nl

MOSS-UNIT (transport-monitoring)

Rugged case	: 305x270x194 mm
Weight	: Approx. 4.5 kg
Battery	: 90 Wh
Connectivity	: 1 x motion sensor
	: 1 x IRIDIUM Unit
Charger input	: 1 x charger 95-240Vac
Charger output	: 1 x 12 Vdc
Display	: 3.5 inch, 320x240 pixel
Software	: Display and store data
Data Storage	: USB stick (8/16/32 Gbyte)
	: 10 Hz (option 20 Hz)
Motion sensor	: Xsens motion sensor Mti
IRIDIUM unit	: GTTS-3000
	: 200x180x100 mm
	: Approx. 2.5 kg + cable