

MOSS

MULTI OPERATION SURVEY SYSTEM



MULTIPURPOSE TOOL FOR FIELD APPLICATIONS AND SURVEY JOBS

MONITORING YOUR PROJECTS

FROM SENSOR TO VISUALISATION



MARITIME



OFFSHORE



SALVAGE



CIVIL



WWW.TARKA-SYSTEMS.NL

COMPLETE SYSTEM INTEGRATION
SENSORS/HARDWARE/SOFTWARE FOR PROJECT MONITORING

MOSS



- Portable / Battery powered
- Sensor data gathering / visualization
- Data logging internal / USB
- Data forwarding wired/wireless
- Time synchronization
- Ethernet / USB connection
- Client specific hardware options
- Client specific software options

CONNECTIVITY

- Digital inputs
- Digital outputs
- Analog inputs
- Counter / Timer
- CAN
- Serial input
 - RS232 (Type 4) or
 - RS485 MODBUS-RTU (Type-5)
- Ethernet

MOSS SPECIFICATIONS



Rugged case	:	305x270x194 mm
Weight	:	approx. 4.5 kg
Battery	:	90Wh (internal)
	:	optional external battery case
	:	Status display
	:	On/Off switch
	:	Power indicator led
Connectivity	:	see previous page
	:	Ethernet connector
	:	USB connector
	:	Multi purpose connector
Display	:	3.5 inch, 320x240 pixels
Charge	:	12 Vdc
Storage	:	1Gb flashdisk (intern)
	:	USB stick (extern)
Software	:	Client specific
DGDM (Data Gathering and Display Module)	:	Type 4 or 5
Specials	:	on request

FREEBOARD / DRAFT / TANKLEVELS PORTABLE

Ultrasonic
Distance sensor



Modbus or mA



Modbus or mA



FREEBOARD DATA 2/5			
VALUE	0.0		
Distance [cm]			
AVERAGE [0]	0.0		
Distance [cm]			
16:22:29	0	0	04.09.2015
Mon/Save			



DEPTH MEASUREMENT

Pressure sensors



Modbus or mA



Absolute pressure



Modbus or mA



Atmospheric pressure

APPLICATION EXAMPLE :

- Depth measurement in Civil excavation pits
- Diver operation assistance



INCLINE MEASUREMENT

**Incline sensor
1 or 2 angles**



mA or V or serial



APPLICATION EXAMPLE :

- Heavy lift
- Heavy transport

FREEBOARD / DRAFT / TANKLEVELS FIXED

Multiple Distance sensors



Max 4x mA sensor



Multiple sensors
by modbus



FREEBOARD DATA 2/5			
VALUE	0.0		
Distance [cm]			
AVERAGE [0]	0.0		
Distance [cm]			
16:22:29	0	0	04.09.2015
Mon/Save			→

APPLICATION EXAMPLE :

- Freeboard / Draft
- Tank levels

MOTION MEASUREMENT

MOTION sensor (external)



RS232 [nmea]



Distance sensor (external)



RS232 [nmea]



optional



Roll & Pitch
monitoring during
loadout on barge



APPLICATION EXAMPLE :

- Roll&Pitch on barge during load out
- With additional freeboard sensor also the draft of the barge is monitored simultaneous

MOTION MEASUREMENT

MOTION sensor (internal)
With additional options (external)



Distance sensor for
draft/freeboard



GPS for location

RS232 [nmea]

optional

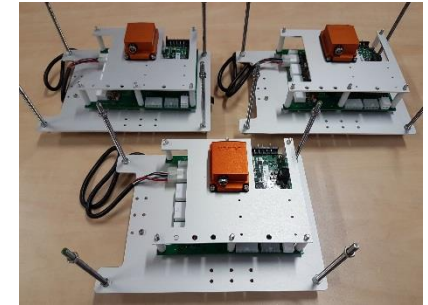


NOTE:

Ideal for quick response projects while engineer can take system in backpack, no special transport or shipping.

APPLICATION EXAMPLE :

- Roll & Pitch monitoring during transport and installation
- (Optional) Draft and GPS sensor to make complete system



Motion sensor
mounted internally



Used on wind-farm
installation vessel



TEMPERATURE MEASUREMENT

Pt100



Convertor
to mA signal



mA signal



Pressure sensor

APPLICATION EXAMPLE :

- Pressure and temp test on new installed pipelines

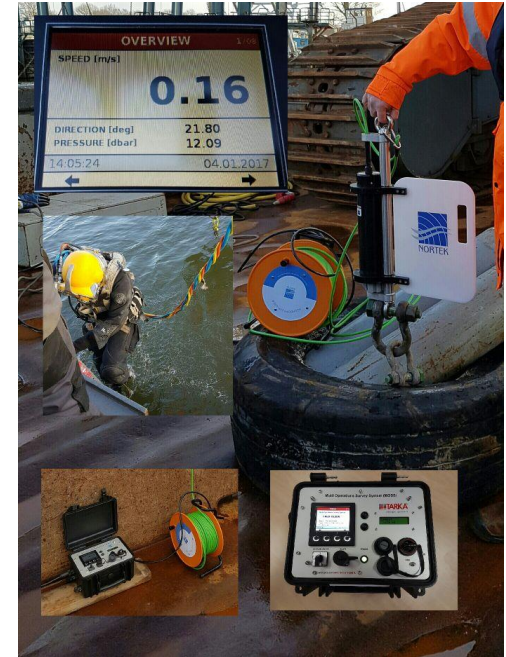


FLOW/CURRENT MEASUREMENT

AQUADOPP

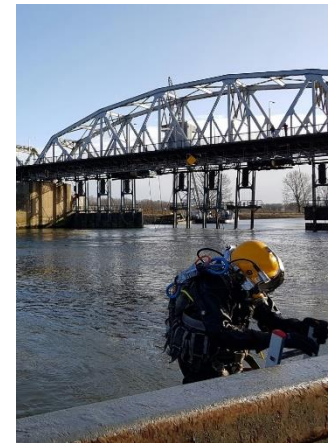


rs232signal



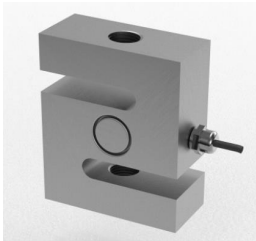
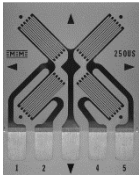
APPLICATION EXAMPLE :

- Flow measurement for diving or submerges activities



STRAIN GAUGE MEASUREMENT

Strain gauge



Load cell

Bridge signal



mA/Modbus/can
signal



APPLICATION EXAMPLE :

- Strain gauges, direct or from loadcell/load pin etc

WEATHER STATION / WIND MEASUREMENT



Windsonic



Maximet



Wind Observer

RS232 output



APPLICATION EXAMPLE :

- Marine, Civil and Offshore applications

DATA THROUGHPUT BY UDP

Random Sensor input



UDP output
to ip-address

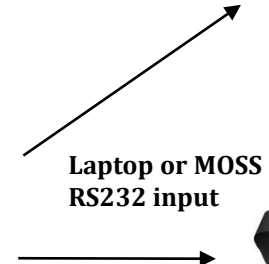


DATA CONNECTION WIRELESS

MOSS data collector



Wireless
datalink

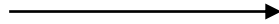


APPLICATION EXAMPLE :

- Remote data presentation
- Ship-Shore data transfer

IRIDIUM CONNECTION

Random Sensor input



Serial output
to IRIDIUM unit



POWER SUPPLY



Netpower adaptor
Convert to 12Vdc

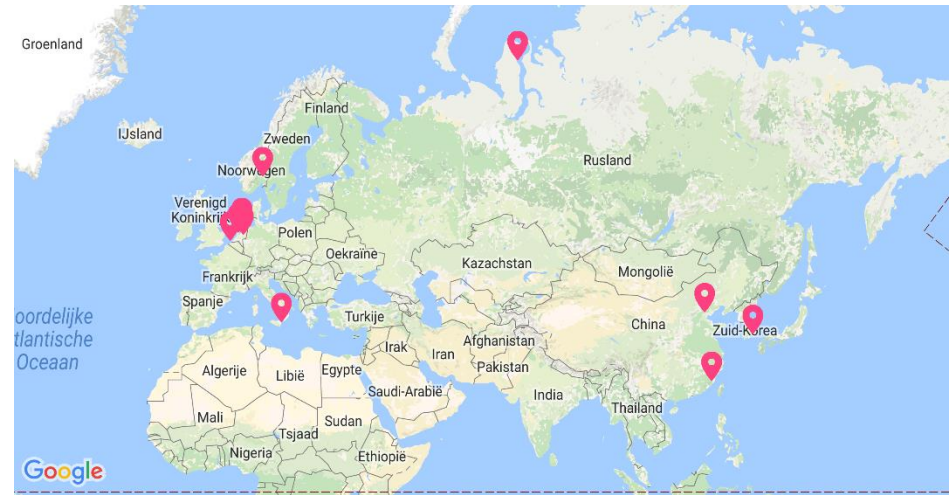
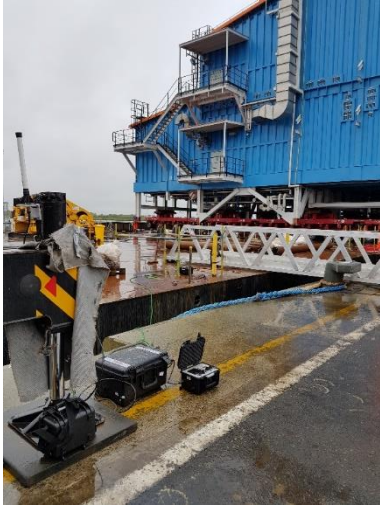


Battery power
12 Vdc



Solar power







BARGE ANGLES

Roll & Pitch angles during load-out



DRAFT/FREEBOARD

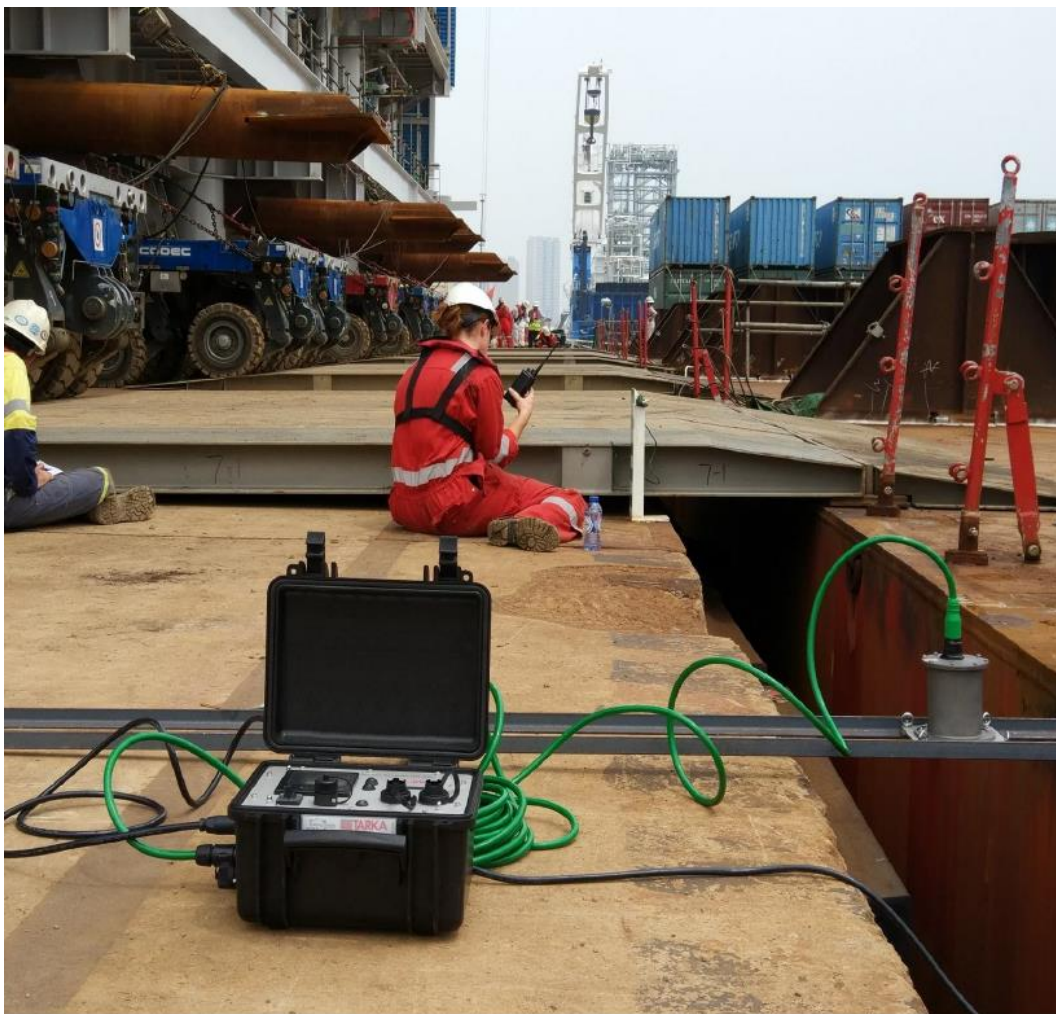
Distance to water

MOSS

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LOAD IN/OUT

Digital ramp-angle measurement, local and wireless to bridge

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ENVIRONMENTAL STATION

Wind, Temperature, Humidity, Pressure

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WHY...

Major companies find their way to
TARKA-SYSTEMS for monitoring systems

CURIOUS? CHECK IT OUT!



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