

K-OBSERVER



KONGSBERG



AUTONOMOUS MONITORING, ANALYSIS AND REPORTING SYSTEM

K-Observer is a fully autonomous monitoring, analysis and reporting system supporting the integration of any sensor with NMEA or ASCII output for continuous and long-term subsea monitoring. It is designed for applications such as scour monitoring, structural monitoring, structural deformation, marine growth and corrosion, displacement of sediments, dredging, environmental monitoring, aquafarming and other similar applications where the sensors are located close to the surface.

The system is designed for Integrated Operation directly from on-shore control centres, which enables higher performance and more cost effective monitoring.

The K-Observer System consists of:

Sensor Interface Unit (SIU)

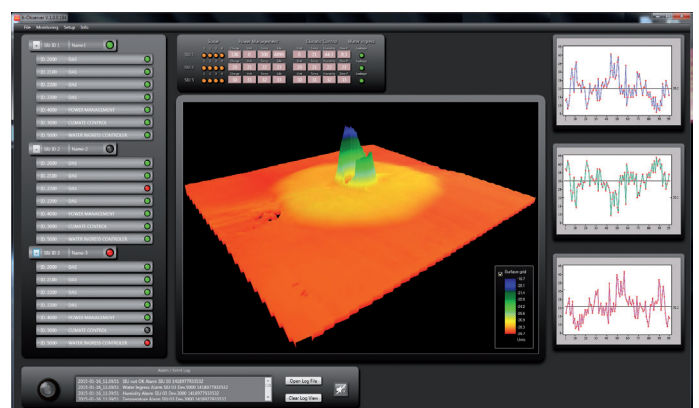
Remote station and interface box for up to ten sensors. Built-in data logger and optional alternative power supply as well as various communication methods such as Ethernet, fibre optic, GSM and satellite.

Data Processing Unit (DPU)

Central data server for the connection of up to ten SIUs. The DPU autonomously handles the system management, data processing and automatic alerts at predefined threshold levels.

User Interface and optional 3D Viewer

User interface software for system monitoring, data retrieval, manual control and 3D visualisation of all sensor data. Optional web user interface.



K-Observer Software Suite user interface with 3D viewer

FEATURES K-OBSERVER

- Fully autonomous monitoring, analysis and reporting system
- Scalable system, supporting integration of any sensor with NMEA or ASCII data output
- Extremely rugged design to meet the harsh conditions at the monitoring location
- Supports use of a broad variety of communication methods such as cable, fiber optics, GSM, satellite
- Alternative power supplies (batteries, solar and wind)
- Data filtering, processing and interpretation algorithms
- Suitable for various applications: scour monitoring, structural monitoring, structural deformation, marine growth and corrosion, displacement of sediments, dredging, environmental monitoring, aquafarming and other similar applications



K-Observer example interfacing up to 4 DAS sonar heads

TECHNICAL SPECIFICATIONS

SENSOR INTERFACE UNIT

- Temperature range -10°C to 45°C
- Size/ Weight Standard configuration
800 x 1000 x 300 mm / 28.5 kg
- Housing IP 66 Glass fibre reinforced polyester
- Power supply Input 110 - 230 VAC
Output 12/ 24 VDC max. 10 A
- Sonar interface Up to 4 sonar heads
- Additional sensors Up to 10 sensors with NMEA or ASCII data output
- Interfaces RS232, RS485, Ethernet, analog input
- Connectivity Ethernet, Wi-Fi, GSM, fiber optic, (RF and satellite on request)
- Certification UL, CE
- Software SIU firmware

DATA PROCESSING UNIT (DPU)

- Temperature range 5°C - 35°C
- Relative humidity 8% - 90% (non-condensing) range
- Size/ Weight Standard configuration
43 x 437 x 503 mm / 14.1 kg
- Housing 1 HU 19" rack mountable
- HDD storage > 2 TB RAID 1, optional RAID 5
- Power supply Input: 110 - 230 VAC, 50 - 60 Hz
- Software DPU firmware

K-OBSERVER SOFTWARE SUITE

- User Interface System monitoring
System configuration
Manual system control
Data download
Automated threshold detection & alarm
- Optional module 3D point cloud data visualization
- Hardware minimum requirements Windows 7 x64, .NET 4.5
Dual Core Processor 2.8 GHz
4GB RAM

Specifications subject to change without any further notice.

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