

SMS ComCentral™

Bringing sensor data to the cloud

Technical Data Sheet

ComCentral™ is used for configuration and management of the Smart Monitoring Sensors (SMS). It can also be used to collect data from sensors and control nodes via industrial bus protocols. The unit allows for onshore configuration of all SMS sensors and for transferring data from SMS sensors to DataReservoir. io™. It can act as a data hub for collecting data from multiple data sources that are to interface with DataReservoir. io™.

ComCentral™ provides a local management interface used by ROV operators when handling subsea SMS sensors. In addition it provides secure remote operation for 4Subsea personnel. This enables safe configuration and management of the SMS sensors by onshore experts.

PROCESSOR/MEMORY

Type AMD A10 Micro-6700T SoC

Cores 64-bit Quad Core

Clock Speed 1.2GHz (boost up to 2.2GHz)

Memory 8GB

HD 120 GB SSD

NETWORKING

LAN Gigabit Ethernet

Wireless WLAN 802.11ac (2.4/5GHz)

Bluetooth 4.0

I/O PORTS

USB 2x USB 3.0 + 3x USB 2.0

LAN 2x RJ-45 GbE

Display 2 x HDMI

Audio 2x 3.5mm jack (Analog or S/PDIF)

Serial 1x RS232 (via mini serial connector)

SD Micro-SD slot (SD/SDHC)

OPERATING CONDITIONS

Input Voltage Unregulated 10 – 15VDC

Power Consumption 4.5W – 10.5W

Operating Temperature -20°C to 70°C

Relative Humidity 10% - 90%

MTTF > 100.000 hours

ENCLOSURE

Material Aluminum & Zinc (all-metal housing)

Cooling Passive Cooling with Heatsink

Length 120mm (exclusive WIFI antenna)

Depth 90 mm

Height 38mm (exclusive DIN-rail mount)

Weight 440g



ACCESSORIES

Power supply Input 100-240VAC 50/60Hz, 36W, Output 12VDC 3A, Attachable NA and EU plugs

Display HDMI to DVI adapter

Serial Mini-serial to DB9-male adapter

Mounting DIN-rail mount

RUGGERISED COMPUTER

ComCentral™ is a ruggedised miniature fanless computer in an all-metal housing. It provides excellent durability at extreme temperatures and conditions of shock, vibration and dust.

OTHER RELEVANT SENSORS IN THE SMS (SMART MONITORING SENSORS) PORTFOLIO

SMS Motion™ - Autonomous and retrofittable motion and vibration sensor

SMS Motion™ is an autonomous subsea sensor and data logger containing a 3-axis MEMS accelerometer and a 3-axis MEMS gyroscope, rated for 3000 m water depth. The sensor can be configured to operate at frequencies from 10Hz up to 1024 Hz, depending on the application. The sensor's low power consumption allows for continuous logging at 10 Hz for more than 360 days.

SMS Gateway™ - Connecting sensors to the cloud

The SMS Gateway™ is an IoT sensor for motion monitoring as well as a hub for data collection and streaming to the cloud. The sensor is easily installed and only requires external power and internet access through LAN or WiFi. Once connected, the sensor automatically starts streaming data to the cloud, where the data is made available through an open API.

SMS Magic Hand™ - Seafloor to topside in seconds

SMS Magic Hand™ is an ROV-carried modem that can be used to configure and download data wirelessly from Smart Monitoring Sensors (SMS) when the sensors are deployed subsea. Raw data or statistical data can be downloaded from the sensor by a simple mouse click on a topside computer.

SMS Strain™ - Retrofittable strain sensor

The patent pending SMS Strain™ is an autonomous, retrofittable strain sensor that can be easily installed. The sensor measures dynamic strain with high resolution (better than 1 μ Strain) and accuracy. Like all 4Subsea SMS sensors, the SMS Strain™ has extremely low power consumption, enabling continuous logging and data storage at 10 Hz sampling frequency for more than 360 days.

TRANSFORMING OPERATIONS WITH 4SUBSEA'S SMS INNOVATIONS

4Subsea helps operators reduce cost of operations and maximise life of assets using autonomous sensors in combination with data analytics and specialist engineering competence. Products in the Smart Monitoring Sensors (SMS) range are SMS Motion™, SMS Strain™, SMS Magic Hand™, SMS Gateway™, SMS ComCentral™, and SMS Guard™. Technology applications include monitoring of wellhead integrity, risers, mooring lines, subsea spools and manifolds, as well as monitoring of pipelines and subsea structures for oil & gas and offshore wind sub-structures.

[More product information](#) →

4Subsea is a leading provider of technology and services that help operators optimise energy production from subsea oil & gas fields and offshore wind farms. We combine domain expertise with data analytics and digital services to maximise lifetime of assets, reduce operational cost and optimise future projects through data-driven design.

The company was established in 2007 and clients include the major energy operators as well as the large suppliers of subsea equipment. 4Subsea is headquartered in Asker, Norway with additional offices in Bergen, Kristiansand, Stavanger, Rio de Janeiro, Kraków and Aberdeen. 4Subsea is a company in the Subsea 7 Group.

4Subsea - Share ideas, move forward

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