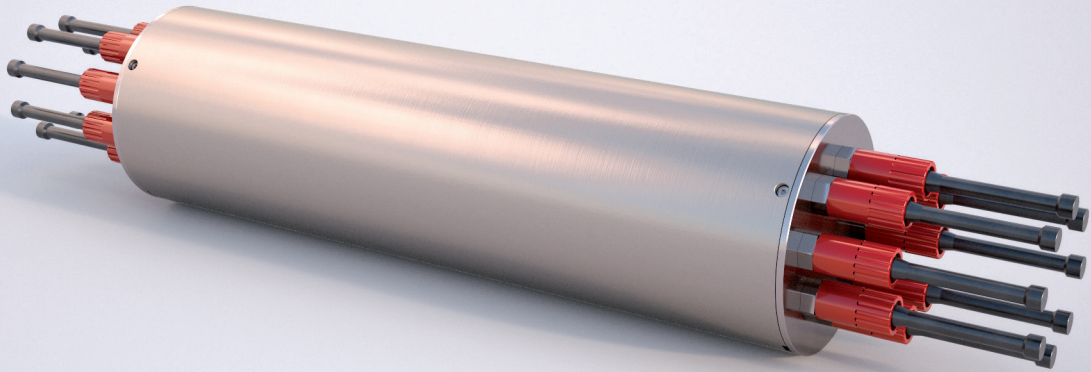


# KONGSBERG DPU



KONGSBERG



## FLEXIBLE SUBSEA DATA PROCESSING UNIT & LOGGER

The Kongsberg Data Processing Unit (DPU) is a highly flexible and adaptable subsea data logger. The logger can be interfaced with analog, RS232, RS485 and Ethernet sensors. The DPU is capable of processing the sensor values into key data, min/ mean /max, or events for example that can be efficiently transmitted via the cNODE® acoustic link, either to a vessel or via a subsea transponder network.

Event based changes in the measurement frequency is one of the more important features of the DPU especially in power limited applications. The Kongsberg DPU is an integral part of the K-Lander system but is also available as a stand alone product.

The DPU can interface to multiple sensors with data stored to the SD or dual SD/SSD drive and communicated via acoustic modem, optical link or Ethernet. An extensive interface library is available for ADCPs, current meters, CTDs, pH sensors, CO<sub>2</sub> sensors, CH<sub>4</sub> sensors, hydrophones, sonars etc. Additional interfaces to integrate other sensor can be developed on request. All data is timestamped and logged by the DPU, however when data must be transmitted real time, it may be telemetered via a cNODE® transponder to the sea surface or relayed across a subsea network of cNODEs (consisting of e.g. several DPUs and cNodes).

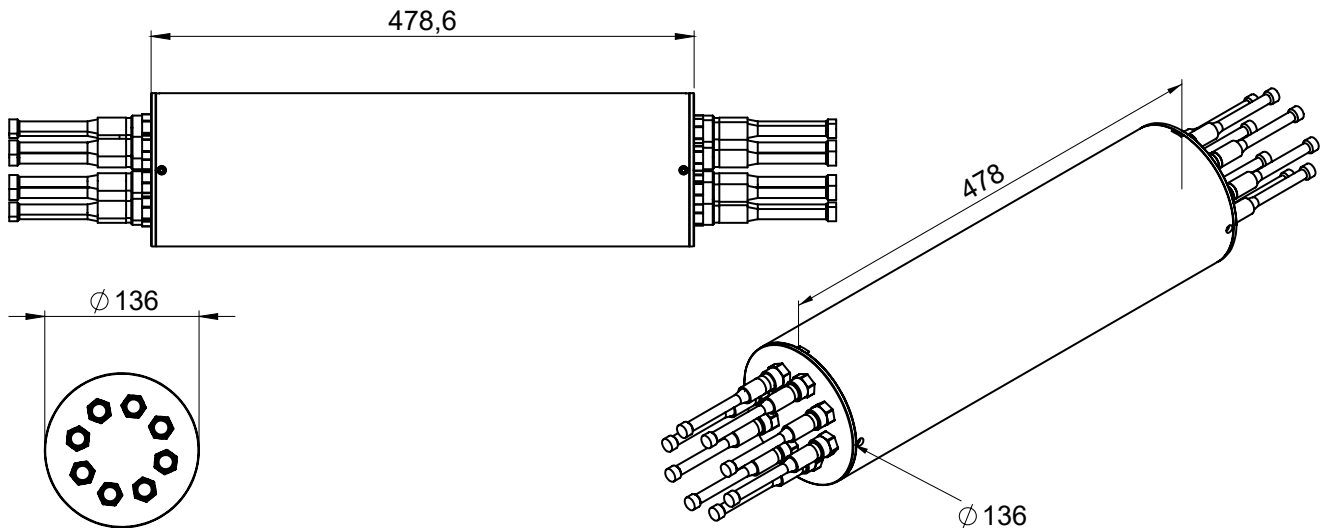
The DPU includes 128 GB of data storage as standard (116 GB usable) which can be extended to 4 TB with an option for redundant storage of key data. All data is stored in a database that guarantees easy access to all raw and condensed data. Online calculation of derived data (e.g. CH<sub>4</sub> concentration from CH<sub>4</sub> and CTD data) is a standard feature of the DPU.

All collected and derived data (and possibly data from remote sensor nodes) can be used to take action based on specific events. A typical example is the change in measurement frequency based on a significant increase of the measured CH<sub>4</sub> concentration in comparison to the reference station (data exchange via acoustic link).

The DPU is optimized for low power battery based applications like lander systems but can also be used in scenarios where processing power and data throughput are a priority.

KONGSBERG can provide service and support starting from concept stage up to the deployment of the sensors systems and the interpretation of data. The support is provided by our in-house team of scientists as well as a team of highly trained field engineers.

## DIMENSIONS



## TECHNICAL SPECIFICATIONS

### Kongsberg DPU

- Standard interfaces
  - 8 x RS232 interfaces
  - 1 x RS485 interface
  - 1 x 100 Mbit Ethernet
  - 2 x 16 bit analog
- Optional
  - Add-on RS232 interface (up to 8)
  - Add-on Analog interface (24 bits, up to 8)
  - 4 x 1 Gbit Ethernet (more on request)
- Connected power supply
  - 12 – 30 V
- Battery power supply typically via Power Management Units (PMUs):
  - One PMU can source from up to 16 cNODE® batteries (1 cNODE® battery: 14.4 V, 128 Ah)
  - Up to four PMUs per DPU (totaling in 64 cNODE® batteries)
- Standard depth capability
  - 3000 m
  - Titanium grade 2
- Housing material
  - 478 mm x Ø 136 mm
- Dimensions
  - 11.5 kg in air
- Weight
  - 4.4 kg in water
- Standard connectors
  - 15 x SubConn MCBH8F,
  - 1 x SubConn DBH13F (other available on request)

### STANDARD SENSOR INTERFACE LIBRARY

HydroC CO<sub>2</sub>, HydroC CH<sub>4</sub>, HydroFlash O<sub>2</sub>, Seabird CTDs, SeaFET, Teledyne and Nortec ADCPs, Mesotech sonars, icListen hydrophones, others on request

### STANDARD ACOUSTIC INTERFACE

HiPAP Cymbal acoustic protocol compatible with cNODE®, µPAP, HiPAP®

### SOFTWARE OPTIONS

- Mission planner
- Deployment software
- Acoustic topside

Specifications subject to change without any further notice.

KONGSBERG MARITIME  
 Switchboard: +47 815 73 700  
 Customer support: +47 33 03 24 07  
 E-mail sales: km.sales@km.kongsberg.com  
 E-mail support: km.support@kongsberg.com

km.kongsberg.com



KONGSBERG