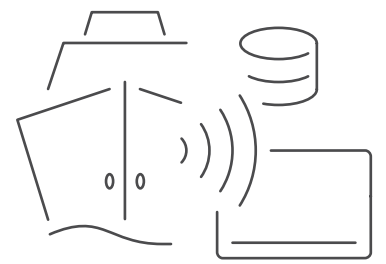


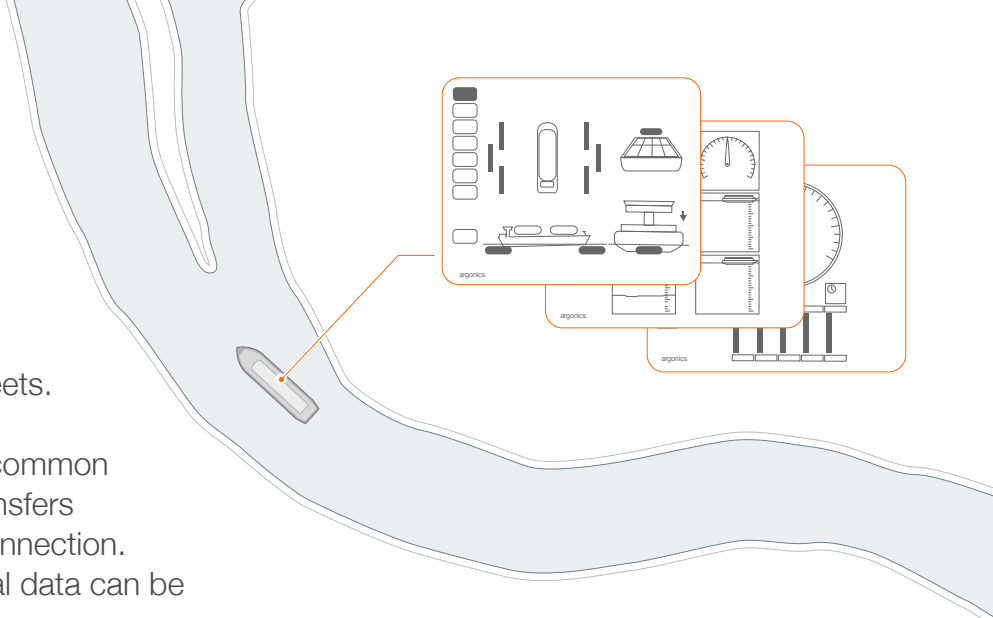
## Product Description and Technical Data



# argoDataPortal

argoDataPortal is a comprehensive solution for the monitoring of inland vessels, single as well as up to entire fleets.

argoDataPortal records and stores all common signals on board inland vessels and transfers them to a central server via a secure connection. Both instantaneous values and historical data can be viewed and evaluated via a web interface.



## Features

- Land-based black box
- Recording of all read-in data
- Graphical display for computers, tablets and smartphones
- CSV export for external applications
- Transmission from ship via encrypted LTE connection
- Encrypted access via browser to argodataportal.de
- Extensive user administration

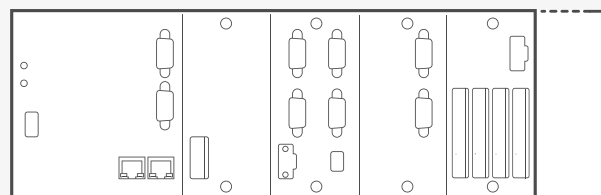
## Benefits and possible applications

- Optimized planning in the office thanks to live data such as position and speed
- Preventive maintenance through long-term analysis (e.g. slow increase in exhaust gas temperature)
- Access for companies regarding maintenance only to certain areas (e.g. Cat - access to engine data)
- Objective comparison of different ships and engine types
- Fuel consumption analysis in relation to water level, stream, loaded draft, RPM, speed
- Display of the CO<sub>2</sub> footprint and further analysis options for travel behavior with subsequent training based on the fuel consumption analysis (e.g. too high RPM at low water depth)

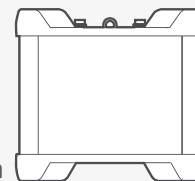
## Interfaces in the standard scope

- Engine data via J1939 or MODBUS
- GNSS receiver via NMEA0183 or NMEA2000
- ROT indicator via analog input or NMEA0183
- Rudder angle indicator via analog input or NMEA0183
- Loading meter by Sygo, tank level indicator, wind meter, river current sensor, temperature gauge, etc.
- Can be expanded with additional interfaces if required

## Scope of delivery argoDataPortal



Control and interface modules (expandable)

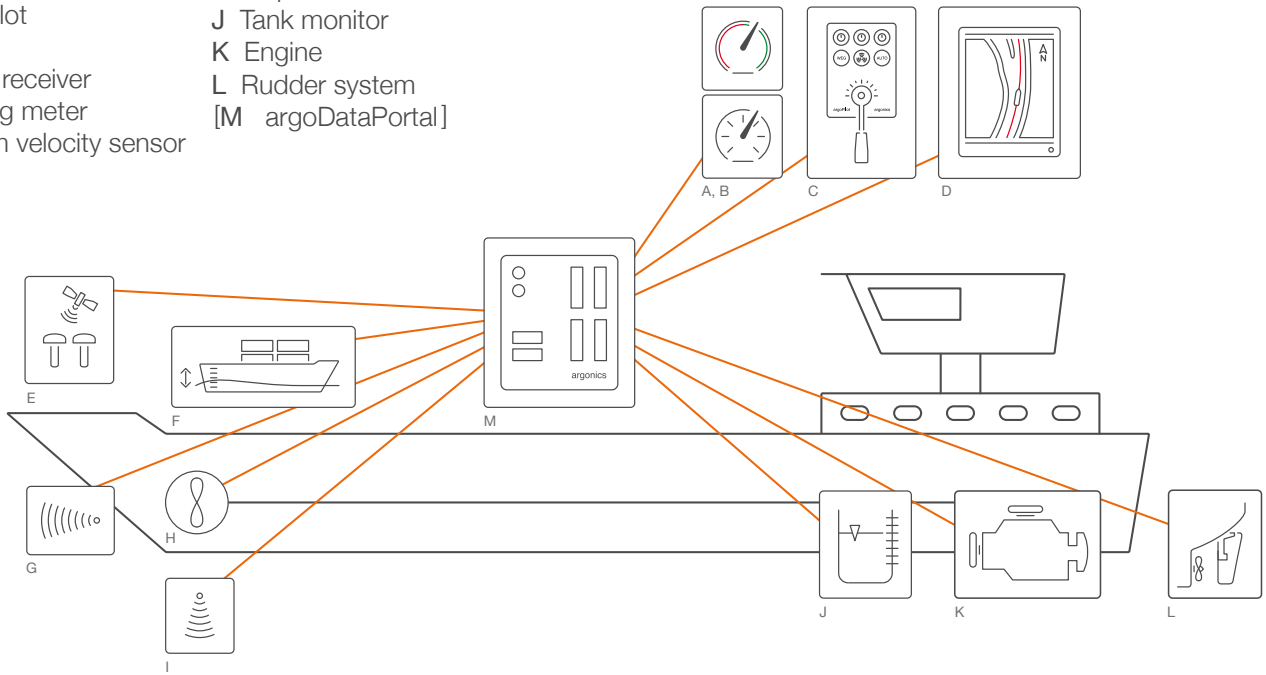


LTE-modem

- Control and interface modules (for mounting on DIN rail)
  - 6 × RS232/RS422
  - 2 × CAN-Bus (J1939)
  - 12 × Analog/digital inputs
  - 2 × Ethernet
  - Can be expanded with additional interfaces
- LTE-modem
- Access to the land-based black box
- Regular data backups

## Possible connections

- A Rudder angle indicator
- B ROT indicator
- C Autopilot
- D ECDIS
- E GNSS receiver
- F Loading meter
- G Stream velocity sensor
- H Bow thruster
- I Depth sounder
- J Tank monitor
- K Engine
- L Rudder system
- [M argoDataPortal]

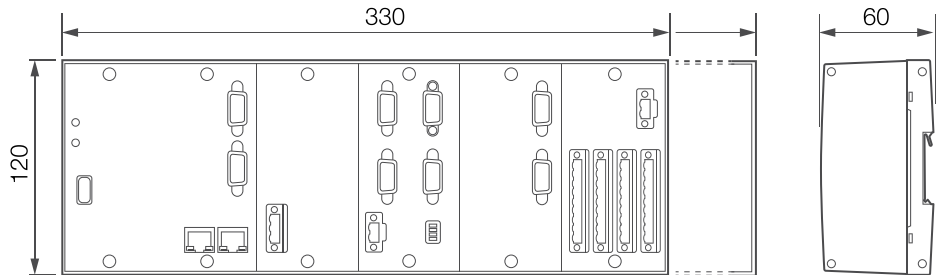


## Technical Data

### argoDataPortal

#### Control system / PLC and interface modules

Supply voltage	18VDC ... 32VDC
Supply current	1,5A
Dimensions	width: min. 330 mm, height: 120 mm, depth: 60 mm
Weight	2,1 kg
Ambient temperature	-25 °C ... 60 °C
Storage temperature	-40 °C ... 85 °C
Relative humidity	5% ... 95%



#### Interfaces

- 6 × RS232/RS422
- 2 × CAN-Bus (J1939)
- 12 × Analog/digital inputs
- 2 × Ethernet
- Can be expanded with additional interfaces

#### Modem\*

IP rating	IP 30
Supply voltage	9VDC ... 30VDC
Dimensions	width: 109,6 mm, height: 100 mm, depth: 50,1 mm
Weight	280 g
Ambient temperature	-40 °C ... 75 °C
Relative humidity	10% ... 90%
Conformity	ES-TRIN 10.20

\*Incl. antennas (not displayed)

