



## data acquisition · localization · Internet

For the connection of machines to the cloud IBL-HYDRONIC provides a hardware module. The iblos-CLOUD-connect is available in 2 versions. For fixed installation in a machine and for mobile use for service personnel. Further options for flexible inputs/outputs and connector types are offered. The use of the robust and very well available LTE Cat M1 and LTE CAT NB1 (Narrowband-IoT) ensures an economic and stable use. Optionally, the CLOUD-connect can perform GNSS positioning or be addressed via WLAN/Bluetooth/Ethernet.

## BENEFITS



- saves travel expenses in the service department
- reduces CO<sup>2</sup> emissions
- opens up new business areas

## PROPERTIES

- high range
- good penetration, can also be used in basements
- low costs
- high number of connections possible
- optimized for IoT applications
- good network coverage
- secure and reliable thanks to industry standard
- automatic fallback to other networks

## ANWENDUNGEN

- connection of machines to cloud functions
- display of sensors, values of the machine
- setting of parameters
- Software updates
- Data management with log files
- User management
- Machine location/tracking via GNSS

## CONFIGURATION

### module options

- ONboard: stay in the machine
- ONroad: mobile unit for service stuff or temporary use in machines

### Interfaces

- 3 CAN-Networks
- 1 USB-OTG (Host/Device)
- 1 IoT Funk LTE Cat NB1 (Narrowband-IoT), LTE CAT M1 , EGPRS
- 1x Ethernet/WLAN/Bluetooth as option
- 1xGNSS als Option

### In/Outputs

- 4 analog/digital Inputs
- 4 digital Outputs
- extensions up to 20 In/Outputs
- optional ECU functionality

### external antennas

- 1 x LTE-CatM (standard)
  - 1 x GNSS (if option is installed)
- different kind of antennas available

### internal antennas

- 1 x WLAN and Bluetooth (if option is installed)

### processor/memory

- ARM Cortex M7 32Bit, 216 MHz
- 2 MB Flash, 4K EEPROM, 512K SRAM + 15kB RAM intern
- Micro-SD-Card external memory (depends from memory-card)
- SIM Card, provider customer-selectable

## TECHNICAL DATA

### electrischer supply

12/24 VDC (9-32 VDC), load-dump-, useable for vehicle üpower supply, voltage internal monitored

### housing

PA12 3D-printed, IP65

### connection

ONboard-Modul: Multi-PIN-connector AMPSEAL  
Onroad: M12 connector

### ambient temperature

-20° C ... +65° C (on demand -40°C...+80°C), not condensed

Supported by:



on the basis of a decision  
by the German Bundestag