Cargo Sense CSBLU

Binartec offers innovative wireless multi-sensors for transport logistics industry

Our multi-sensors are unique multifunctional devices that solve cargo transportation security tasks and monitor the conditions of the cargo transportation.

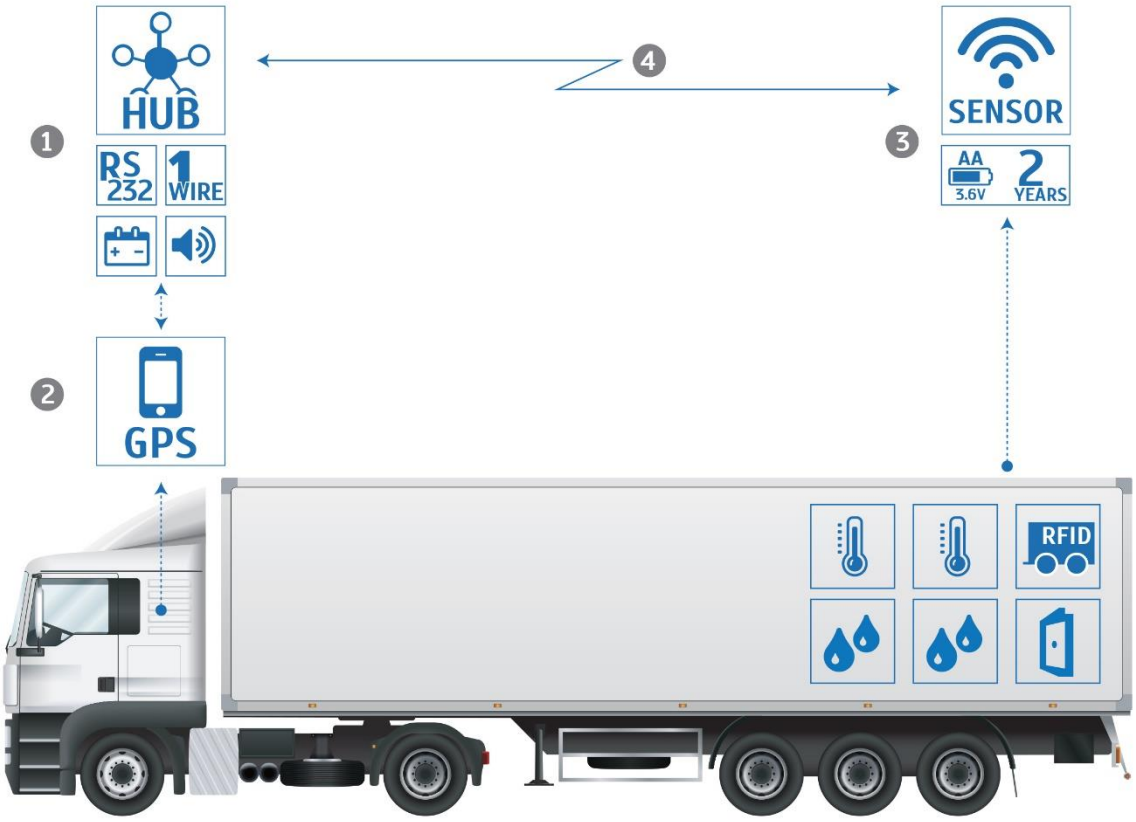
Our devices monitor doors state (opening and closing), control two temperature areas at once, and identify the trailer.

Our Hub wireless receivers have various interfaces and protocols to connect any telematics equipment. This allows to use existing telematics equipment and GPS monitoring software.

We are using an anti-jamming radio channel in our solution which ensures secure data transfer when traffic is moving.

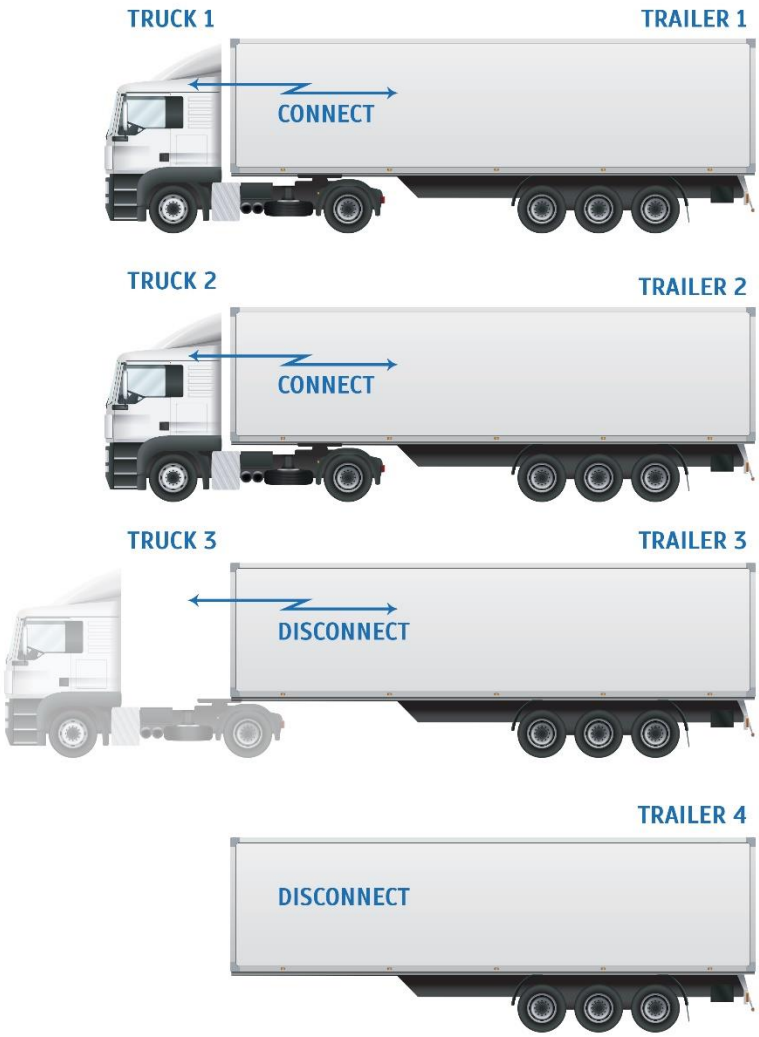
CSBLU product line consists of CSBLU-H10 hub and CSBLU-S10 wireless multi-sensor. CSBLU-H10 installation takes place in the immediate closeness of GPS tracker. CSBLU-S10 installs in the van/trailer cargo compartment. One hub CSBLU-H10 supports connectivity for up to 4 CSBLU-S10 sensors. The equipment uses Bluetooth LE 4.2 radio protocol.

Functional schema



1. HUB receives data CSBLU-S10 from wireless sensors and transmits it to GPS tracker using RS232 and 1Wire interfaces.
   It includes a power output connection for hooter or buzzer (used to notify a driver when van/trailer door is opened)
   The power supply voltage of the device corresponds to the vehicle's on-board system (10-36V).
2. GPS tracker.
3. SENSOR identifies the trailer using Binartec RFID Trailer technology, collects data from temperature sensors, doors and transmits it to CSBLU-H10 over wireless connection. One CSBLU-S10 sensor replaces up to 4 “conventional” sensors from competitors. Sensor controls two temperature zones. It is possible to connect temperature sensors DS18B20 or temperature and humidity sensor BS7210.
4. The equipment uses Bluetooth LE 4.2 radio protocol.

Trailers identification



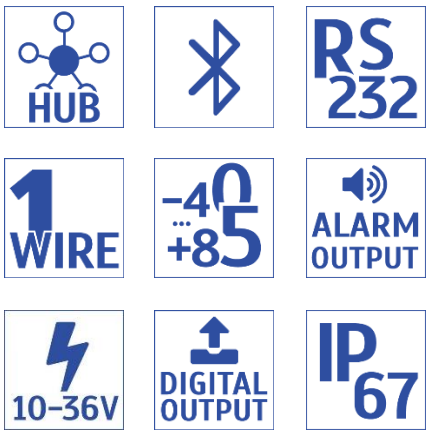
For the optimal utilization of trailer fleet and trailed equipment it is necessary to know exactly the trailer location and which vehicle it is used with. It is also necessary to be able to store and view the trailer usage history.

Our devices for trailers identification provide solution for these tasks.

It operates on the innovative wireless protocol Binartec RFID Trailer basis and using a multi-sensor installed in a trailer/van as well as a HUB receiver connected to GPS tracker. If necessary the solution allows to customize your unique trailer and vehicle identification areas according to various criteria: between companies, between different trailer types, to assign trailers only to a certain vehicle, etc. This allows to create your own unique trailer identification rules.

CSBLU-H10

HUB receives data CSBLU-S10 from Bluetooth sensors and transmits it to GPS tracker using RS232 and 1Wire interfaces.

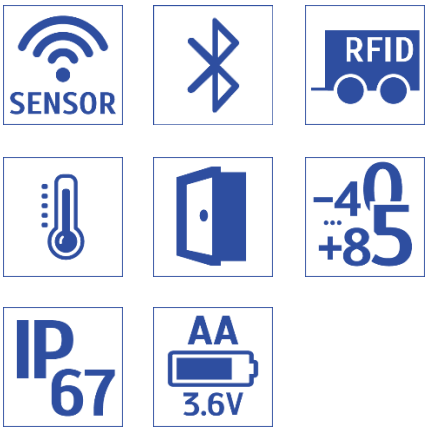


Description

- Secure wireless communication through a unique anti-jamming radio protocol
- Integration with any existing GPS monitoring system
- 1Wire protocol (temperature sensors and trailer identification) support
- Proprietary RS232-protocol Binartec RS232 Cargo Sense (all sensors and diagnostic data) support
- Two logical door statuses outputs available
- Power output connection for hooter or buzzer (used to notify a driver when van/trailer door is opened)
- No cost maintenance
- Ability to upgrade firmware OTA
- Easy installation
- Ability to configure the device using mobile application CSBLU Setup
- Bluetooth LE 4.2
- ETSI EN-300-328
- Security class IP67
- Ports: RS232, Door1, Door2, 1Wire
- Operating temperature range: -40..+85C
- Radio signal range: 200m LoS
- Supply voltage: 10-36V
- Current consumption: 16mA
- Device size: 115x65x40, Weight: 150 g

CSBLU-S10

SENSOR identifies the trailer using Binartec RFID Trailer technology, collects data from temperature sensors, doors and transmits it to CSBLU-H10 using wireless connection. One CSBLU-S10 sensor replaces up to 4 other “conventional” sensors. Controls two temperature zones.



Description

- Secure wireless communication through a unique anti-jamming radio protocol
- Innovative trailer identification algorithm
- Ability to configure identification areas
- High accuracy of temperature measurement up to ± 0,5 C
- Ability to connect up to two temperature sensors DS18B20 or BS7210
- Temperature measurement every 60 seconds
- Communication failure control
- Battery level monitoring
- No cost maintenance
- Ability to upgrade Firmware OTA
- Easy installation
- Battery life up to 2 years
- Ability to configure the device using mobile application CSBLU Setup
- Bluetooth LE 4.2
- ETSI EN-300-328
- Security class IP67
- Ports: 2 x DS18B20, Door
- Operating temperature range: -40..+85C
- Radio signal range: 200m LoS
- Battery AA 3.6V
- Device size: 115x65x40: 115x65x40, Weight: 150 g

Quality

Binartec's focus is providing high quality equipment. QC (quality control) occurs at multiple stages: from product design to selection of suppliers and agents in the production chain.

For our equipment we use only the best manufacturers and components in its class.

Our equipment manufacturing facilities are certified to the ISO 9001 standard.

For QC, we use automatic control lines, where all modes of operation of each device are tested.

All our equipment is independently tested in European testing centers for electronic devices meeting international standards for electromagnetic compatibility.