PRODUCT INFORMATION

Intelligent battery sensor (IBS) 12 V

- → Accurate measurement of voltage, current and temperature battery parameters
- → Determination of the battery condition parameters – state of charge (SOC),state of health (SOH) and state of function (SOF)
- → Simple electrical and mechanical integration
- → OE Quality

PRODUCT FEATURES

Customer benefits
The intelligent battery sensor (IBS) , generation II, informs you about the current energy balance, allowing you to plan your energy supply.

CI BUS

The IBS generation II also comes with the tried-and-tested CI bus interface, which is increasingly becoming a standard in the caravaning and motorhome industry. This communications interface can be used, for example, to convey the battery's charge status to the charging system, which switches on automatically if necessary.

Application
The intelligent battery sensor (IBS), generation II, from HELLA is the key element for vehicle energy management in the vehicle. The IBS generation II reliably and accurately measures the battery parameters: voltage, current and temperature. Information about the battery's state of charge (SOC), state of health (SOH) and state of function (SOF) is calculated algorithmically from the measurements. The IBS generation II is designed for use in starter, gel and AGM batteries to monitor in-vehicle starter or consumer batteries. The IBS generation II can be directly integrated into the vehicle's electrical system (e.g CI BUS) with the standardised LIN protocol.

DESIGN AND FUNCTION

1. Shunt at sensor
2. Connector
3. Sensor module
4. Negative terminal clip
5. Screw-on bolt For cable lug contacting (ground cable)

Installation at standard battery pole

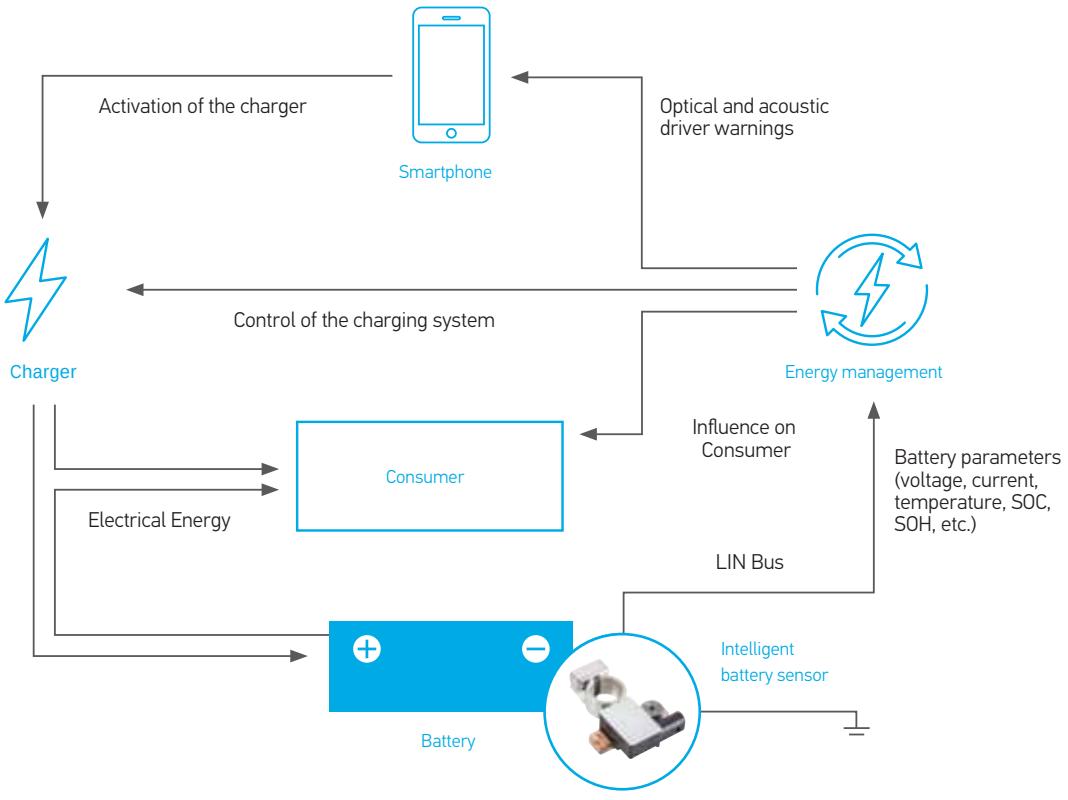
The IBS generation II is attached directly to the negative terminal of the battery via the pole terminal. In addition to the terminal, the mechanical portion of the battery sensor consists of shunt and ground bolt components. The shunt is attached to the vehicle's load path and is used as a measuring resistor to measure the current indirectly. The existing ground cable can be easily fixed to the grounding bolt with a cable lug.

The electronics are located in a molded casing with a plug connector, functioning as the interface to the energy management system. The communication interface to the higher-level control unit is the LIN protocol. The supply voltage, used simultaneously as the reference voltage for voltage measurement, is provided by the connection to the positive pole of the battery.

Compared to previous generations, the IBS generation II offers the following benefits: This sensor can now also monitor more powerful batteries. Thanks to the higher nominal capacity that can be set, this battery sensor can also be used to monitor several batteries connected in series. Instead of 250 ampere hours they can be configured for up to 500 ampere hours (Ah). This is particularly important in view of the growing energy requirements of motorhomes, passenger cars, EVs, agricultural vehicles and last mile vehicles. These new IBS generation II units are also particularly robust and can reliably detect short-term, high current consumption – for example when bow thrusters are used.

ENERGY MANAGEMENT

By using the intelligent battery sensor, the energy management system can react quickly in the event of a critical battery condition and influence both consumer and charging behavior.



HELLA INTELLIGENT BATTERY SENSORS

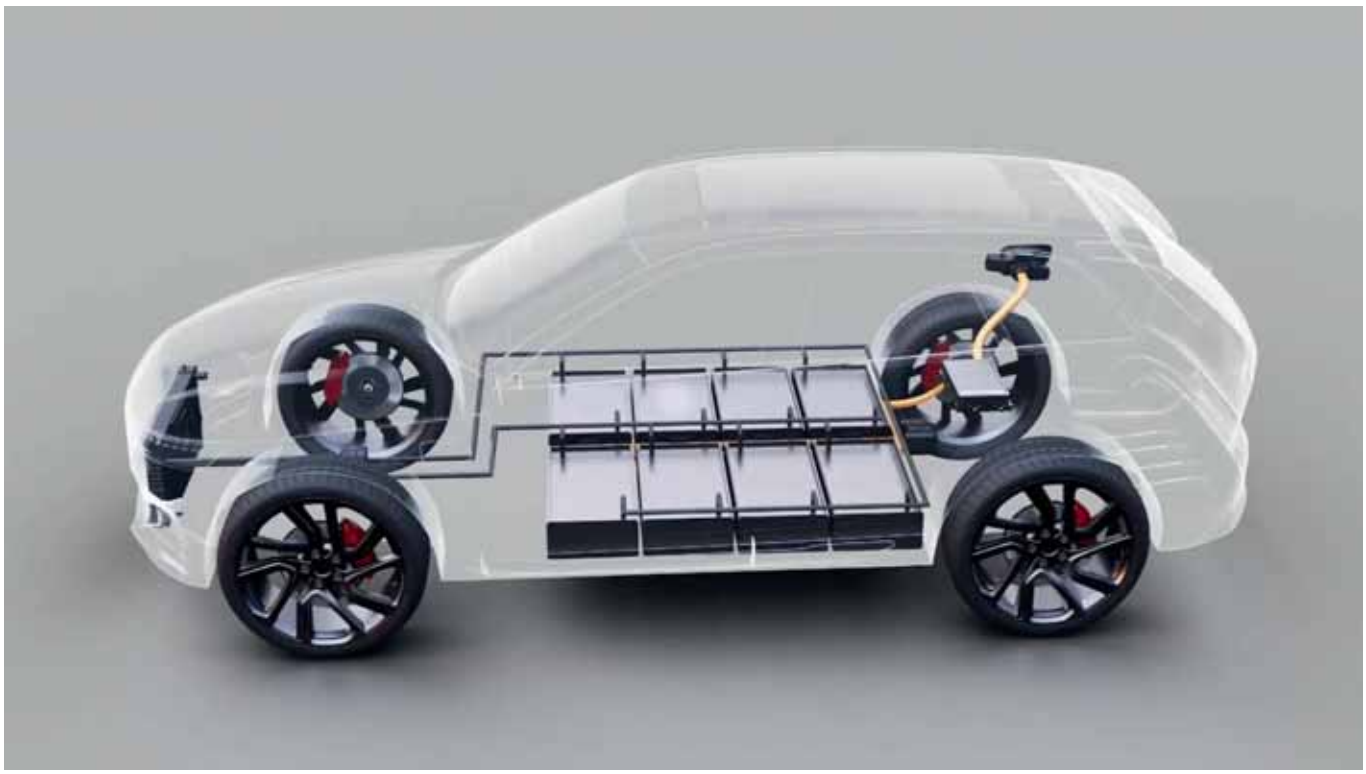
UNLEASHING THE ELECTRIC VEHICLE'S FULL POTENTIAL

Allowing for **affordable intallation** in the vehicle

Measuring current, voltage and temperature directly at the battery

HELLA is market leader in the field of intelligent battery sensors

Over 130 million delivered IBS since 2000



HELLA INTELLIGENT BATTERY SENSORS

Product features, specifications and availability are subject to change without notice.

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