

SensEver® HSI-BLE

BLE connected and self-powered hot surface indicator

- self-powered: No batteries - no maintenance
- settable alert trigger temperature
- ATEX Zone 2
- BLE connected temperature data
- IP67



Wireless process monitoring and optical alert

SensEver HSI-BLE enhances process monitoring at the production floor level. The temperature of the surface it is mounted to is measured and transmits via Bluetooth Low Energy (BLE). At a preset threshold an optical alert is activated. The SensEver HSI-BLE is self-powered, ensuring autonomous and maintenance-free operation throughout its entire lifetime.

Technical specifications

Dimensions (without adapter):	35mm x 35mm x 60mm
Suited pipe diameter:	>8 mm
Materials:	Aluminium/PTFE
Max surface temperature:	145°C (at 25°C RT)
BLE and LED functional at minimum:	$T_{\text{surface}} = T_{\text{air}} + 12^{\circ}\text{C}$
Power supply:	Self-powered (TEH)
ATEX rating	Zone 2

Simple installation and autonomous operation

SensEver HSI-BLE is mounted directly to the surface or pipe to be monitored by using a standard metal strap.

SensEver HSI-BLE enables local wireless temperature monitoring. Furthermore, it features an optical alert visualizing the process status and improving production safety by indicating the risk for contact burns for close by staff.

SensEver HSI-BLE converts the local temperature difference into electricity and is therefore self-powered and maintenance free over its entire lifetime of +10 years.

Application

SensEver HSI-BLE operates in a pipe temperature range of -40°C to +145 °C, can be submerged in water and is applicable in ATEX Zone 2 environment.

Functionality

SensEver HSI-BLE can be mounted on pipes of any diameter with interchangeable interfaces.

Data Structure

The data is transmitted via a Bluetooth Low Energy (BLE) 5.0 advertisement in a single block, with the least significant byte (LSB) first. The data block is packed in the following format:

- uint32_t packet_counter
- uint16_t input_volt_mV
- uint16_t bat_volt_mV
- int16_t temperature_in_0.1C