

SMARTebox BLE

Outdoor remote solution for monitoring BLE and Modbus networks

The SMARTebox BLE is an IoT solution for remote reading of Modbus devices and serves as a data collector for all BLE-enabled sensors. In addition, a local digital contact is available for remote reading of alarms, switching states, or water and gas meters with pulse interfaces.

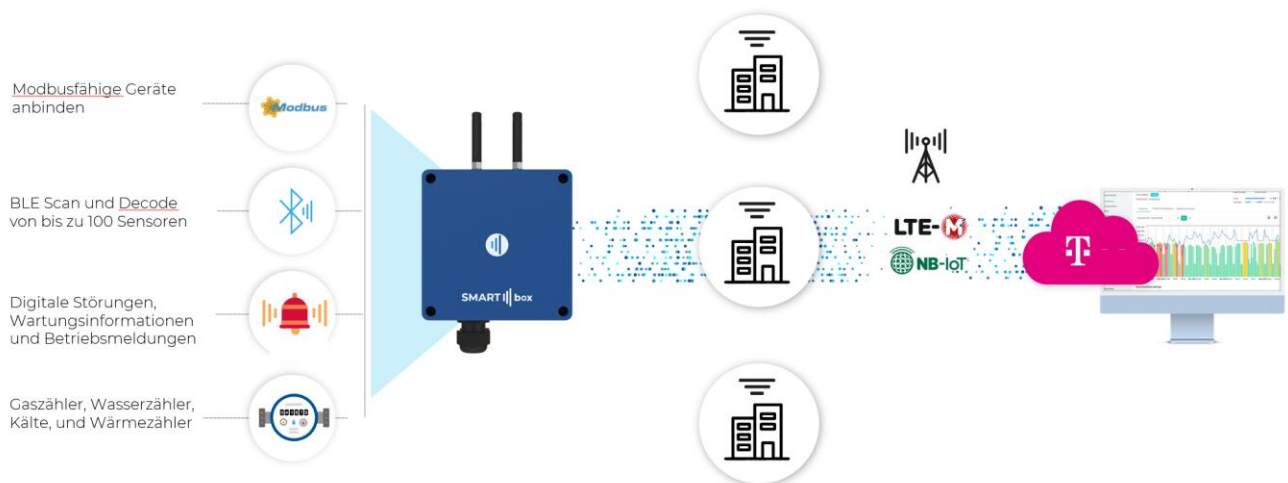
The wireless data logger is powered by 110V/230V and is waterproof. Thanks to cellular connectivity via LTE-M and NB-IoT, the SMARTebox BLE enables monitoring of decentralized and underground installations. If the signal is significantly attenuated in the shaft, an external antenna can optionally be used.

Data transmission and integrity are ensured via the Telekom PSA-certified transmission path to the IoT platform. Through the open REST API of the IoT platform, data can be accessed by any operator system.



Keyfeatures

- Modbus RTU Master
- BLE scanning and decoding for up to 100 BLE sensors
- 1 x pulse or alarm input
- Range approx. 40m (indoor), 600m LoS
- Waterproof housing IP65
- Remote configuration via IoT platform
- REST API for integration with the operator system
- Web app for commissioning



RADIO



NBIOT / LTEM	B1 B2 B3 B4 B5 B8 B12 B13 B18 B19 B20 B25 B28 B66 B71 B85 B103
2G	B2 B3 B5 B8
Regions	WorldWide



LOCATION SERVICES



Cell Location	Location service is provided via cell location. Note: Not supported with NB-IoT.
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SENSOR AND DATA ACQUISITION





Layout	Interior View	
Modbus RTU		<p>Modbus RTU Master RS485 / RS232 (optional)</p> <p>Transmission rates: 4800, 9600, 19200, 38400, 57600, 115200</p> <p>Parity: Even, Odd, None</p> <p>Stop bits: 2,1</p> <p>Functions:</p> <ul style="list-style-type: none">· Function 1 (Read Single Coils)· Function. 2 (Read Input Status)· Function 3 (Read Holding Registers)· Function 4 (Read Input Registers)· Function 5 (Write Coil)· Function 6 (Write Holding Register) <p>Datapoints: Max. 10 Modbus Slaves with 100 data points per device or 1000 data points with 1 device</p>
Digital Input	Pulse Input	Suitable for direct connection of gas and water meters with pulse interface. Max. frequency: 10 kHz
	Alarm and Fault Contact	Potential-free input for detecting states and alarm contacts
BLE Interface	Bluetooth	v5.0 (Bluetooth low energy)
	Range	Max. 1400m
	Output power	8 dBm

Sensitivity	-94 dBm (1 Mbit/s)
Function	Scanning/Advertising/Open Mesh/Repeater

GENERAL



Power Supply	230V +/- 20%, 50Hz +/-5%
Operating T / H	-40°C....85°C / Max. 85%
Storage T	-40°C....85°C / Max. 85%
IP Rating	IP65
Weight	400g
Dimensions IP65	120 x 120 x 90 mm
Mounting	DIN Hutschiene (IP20) / Wallbox (IP65)
Certification	 
Conformity	2014/53/EU (Radio Equipment Directive) Radio EN301511 v12.5.1 EN301908 v13.1.1 EMC (Electromagnetic Compatibility) EN 301489-1 v2.2.0 General Part EN 301489-52 v1.1.0 DIN EN 61326-1 - 2018-09 EN 301489-17 v3.1.1 for Bluetooth Low Energy Safety DIN EN 61010-1:2020-03;VDE 0411-1:2020-03 Cybersecurity EN 18031:2024
Warranty	1 year

Remote Manager

Third-Party IoT Platforms

Fleet Management:

Activate, monitor, and diagnose your devices from a single point — your desktop or mobile app.

Monitor the condition of your connected system by analyzing charts from various widgets.

A wide range of evaluation options is available to you.

Cockpit:

Create threshold monitoring, events, critical alarms, warnings, and reports.

Open API:

Generate notifications or simply use the REST API from the cloud platform to supply all data to your third-party systems.



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