2024

FUEL LEVEL SENSOR   BLE

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Table 1. BLE Capacitive Fuel Level Sensor Specifications

Name	Value / unit measurements
Measurement error in the working area, no more	1%
Operating modes	digital
Digital mode: - interface - communication protocol	Bluetooth LE (BLE) Escort BLE
Operating range (under normal operating conditions in the absence of interference and obstacles with base work)	10 meters
Life time	over 7 years
Battery	ER14335 LiSOCl2, 2x1650 мА*ч
Period of data exchange with the base	10 Seconds
Receiver sensitivity / transmitter power	-96 dbm/ 6 dbm
The degree of protection of the shell in accordance with GOST 14254	IP67
Protection against electric shock according to GOST 12.2.007.0	class III.
Terms of Use: - ambient temperature - limiting ambient temperature - Atmosphere pressure	- 40 ... + 50 °C - 60 ... +85 oC 84 ... 106.7 kPa
Overall dimensions, no more	75x75x(L) mm, where L is the length meter in mm
Sensor length	200...6000 mm

Table 2. Wireless Capacitive Level Sensor Base Specifications fuel BLE-BASE

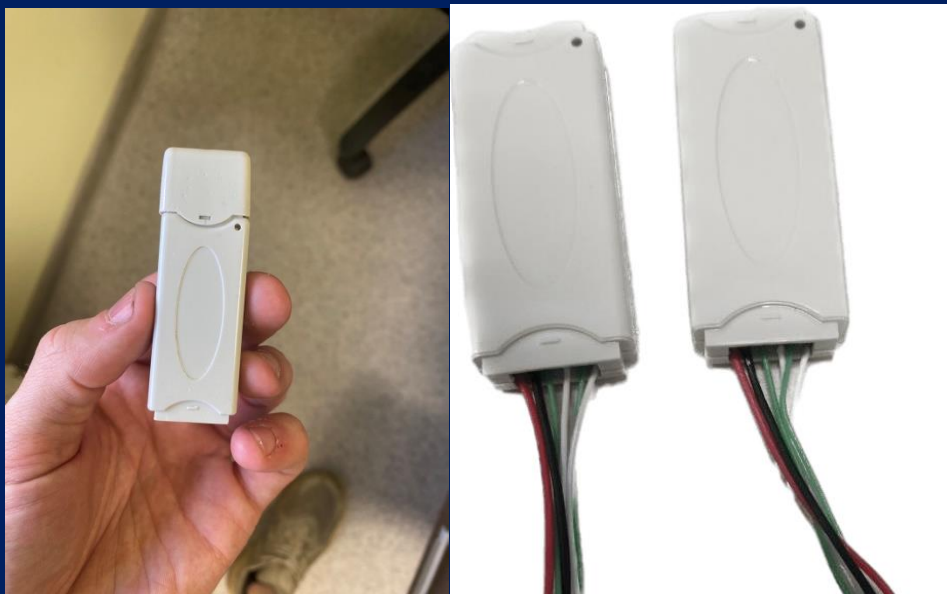| Name	Value / unit measurements
Operating modes	digital
Digital mode: - tracker interface - communication protocol - data exchange rate - interface with the meter	RS-485 LLS 19200 bps Bluetooth LE (BLE)
Output signal range: - digital signal	0 ... 4095 units or 0 ... 1023 units
Operating range (under normal conditions operation in the absence of interference and obstacles when working with the meter)	10 meters
Period of communication with the meter	10 Seconds
Receiver sensitivity / transmitter power	-96 dbm/ 6 dbm
The degree of protection of the shell in accordance with GOST 14254	IP67
Protection against electric shock according to GOST 12.2.007.0	class III
Terms of Use: - ambient temperature - limit - Atmosphere pressure	- 40 ... + 50 °C - 60 ... +85 oC 84 ... 106.7 kPa
Overall dimensions, no more	56x23x10 mm
Weight, no more	0.1 kg

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Table 3. An example of setting up a BLE fuel level sensor through a mobile application.

1

2

RFL		⚙

RKT_FUEL_CF:E3:4E:E6:E0:BF — CONNECT

TEMP:	22.72	LVL:	245
RSSI:	-74	BATTERY:	95%
Frequency:	4352	TIME:	18
Status:	Unknown error		

TD_5EA4F5 — CONNECT

TEMP:	18.0	LVL:	0
RSSI:	-53	BATTERY:	3.6V
Frequency:	14647	TIME:	19
hw_id 1	fw_version 18	mode 128	tc_mode 0
Status:	Normal		

TD_531949 — CONNECT

TEMP:	199.0	LVL:	0
RSSI:	-93	BATTERY:	3.9V
Frequency:	0	TIME:	80
hw_id 1	fw_version 137	mode 0	tc_mode 0
Status:	Normal		

TD_237051 — CONNECT

RFL		⚙

FLS name:	RKT_FUEL_CF:E3:4E:E6:E0:BF
MAC:	CF:E3:4E:E6:E0:BF
Hardware version	0.12
Hardware revision name	hw.833.v1
FLS operating time since battery installation	9836885

Sensor readings	REFRESH
fuel_level	245
Period	1838
Frequency	4352
Temperature	22.89
Battery charge	95%
Flags	3

FLS parameters	
FLS length, mm	0 — CHANGE
Escort emulation	☐

DISCONNECT

11:47   4G .ıl 17%

RFL   ⚙

Escort emulation   ☐

escort_id   123456   **CHANGE**

EXTRA OPTIONS

Calibration

Frequency with empty FLS	4901	**CHANGE**
Frequency at full FLS	3212	**CHANGE**
Indications for empty DUT	0	**CHANGE**
Indications for full FLS	1023	**CHANGE**

CALIBRATE EMPTY   **CALIBRATE FULL**

AUTOMATIC CALIBRATION

VIEW CALIBRATION TABLE

READ AGAIN   **SAVE CHANGES**

DISCONNECT

11:47   4G .ıl 17%

RFL   ⚙

Escort emulation   ☐

Data averaging
0 - do not average

0

Choice of averaging algorithm
0 - running average;
1 - median filtering

Temperature coefficient
0 - do not perform thermal compensation

0

Temperature compensation algorithm
No compensation

Disabling Delay
Temporary disable delay (seconds)

0

OK   **CANCEL**

READ AGAIN   **SAVE CHANGES**

DISCONNECT

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