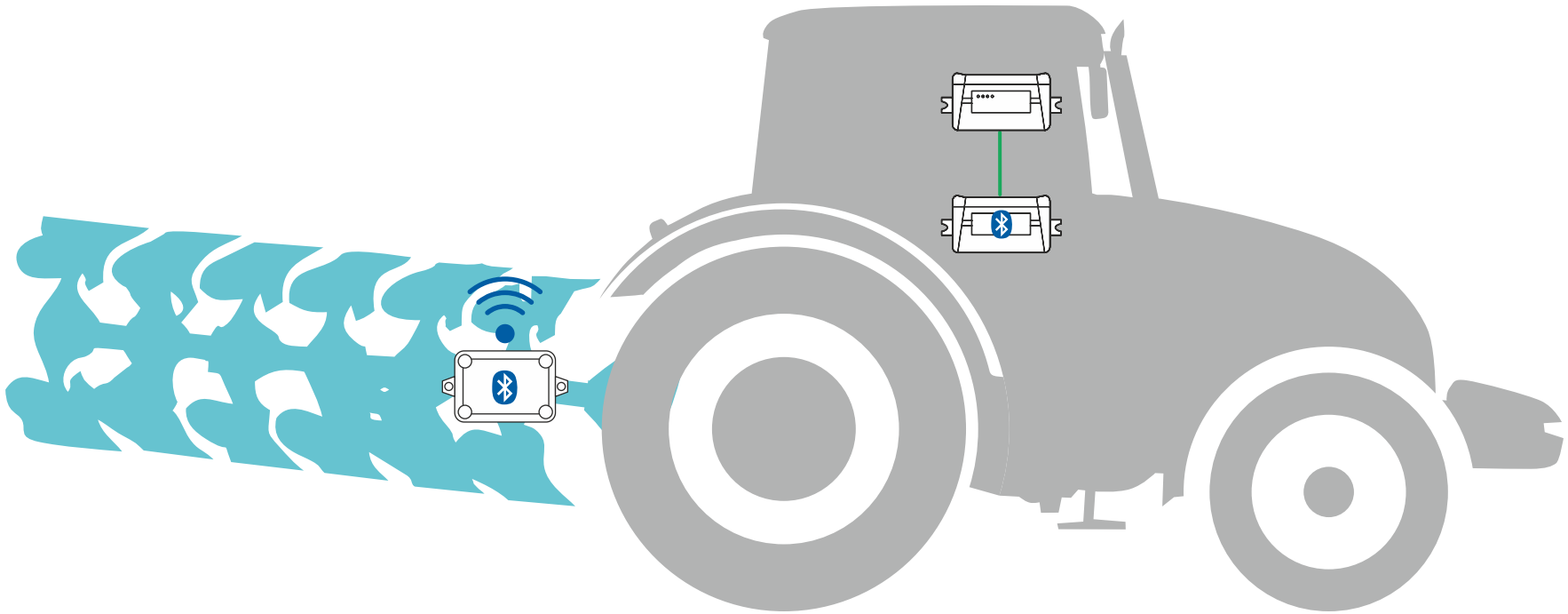
Marker S7

Wireless ID system for attached equipment

TECHNOTON
ADVANCED VEHICLE TELEMATICS



www.jv-technoton.com

Goals

Identification of hauling/attached equipment.

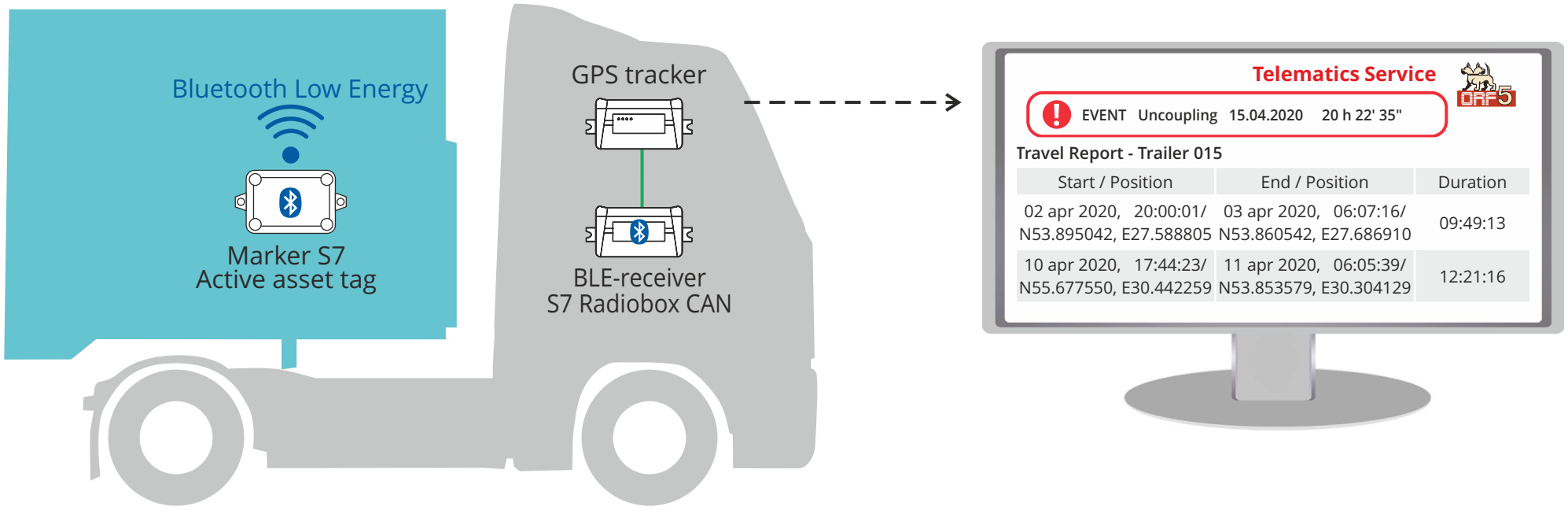
Event notification – equipment coupling/uncoupling (place and time).

Recording duration of equipment operation.

Application

- ✓ Trucks with semi-trailers;
- ✓ fuel tankers with trailers and semi-trailers;
- ✓ tractors with attachments;
- ✓ road-building equipment with attachments;
- ✓ utility vehicles with trailed equipment;
- ✓ containers, tanks and other objects without onboard and external power supply.

System composition



- ✓ Marker S7 active asset tag constantly transmits a signal in the "BLE-radio" mode.
- ✓ S7 Radiobox CAN BLE-receiver receives the signal from the tag, measures vehicle power supply voltage and sends data to Terminal's CAN j1939 port.

TECHNOTON

Marker S7 active asset tag

Installed on attached equipment, and identifies it in the wireless identification system.
Once per 5 seconds sends tag ID and ambient temperature to the BLE-receiver.

Marker S7 Advantages

Ultra-low power consumption – tag time operation from the built-in battery for at least 5 years.

No cable – explosion- and fire-safety.

No cable – quick installation, increased resistance to vandalism.

IP 68 body, a wide range of operating temperatures – from –40 to +85 °C.

Marker Wireless ID system for attached equipment

TECHNOTON

S7 Radiobox CAN BLE-receiver

Installed in cab.
Receives continuous BLE signals from all tags within a radius of up to 50 m.
Receives data from the vehicle power supply system.

TECHNOTON

Parameters, Counters, Event notification

S7 Radiobox CAN processes Marker S7 signals and sends Parameters, Counters and Events notifications in CAN j1939 messages to a GPS tracker or other telematics unit.

Parameters

- ✓ equipment coupling or uncoupling time;
- ✓ equipment coupling or uncoupling coordinates;
- ✓ ambient temperature in the location the tag is mounted;
- ✓ equipment ID.

Counters

- ✓ travel time with coupled equipment;
- ✓ fuel consumption during a trip with a trailer;
- ✓ operating time in different modes of the vehicle power supply.

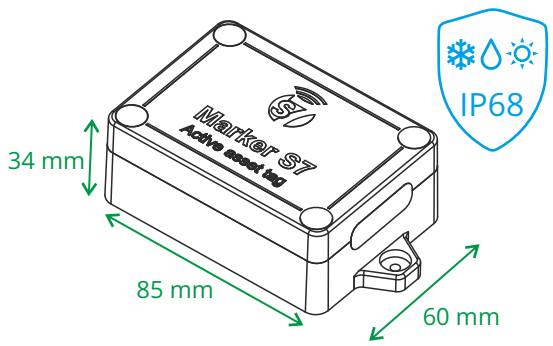
Event notification

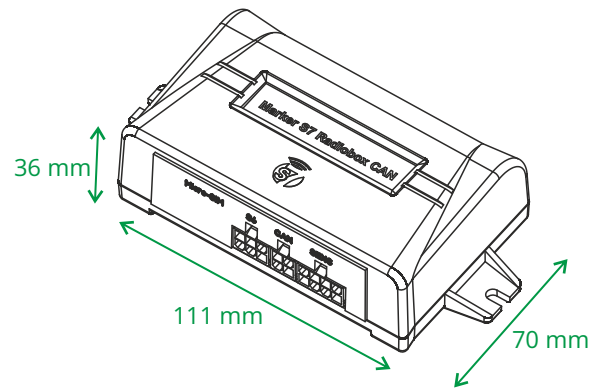
- ✓ equipminent uncoupling/coupling;
- ✓ increased voltage and power supply malfunctions.

TECHNOTON

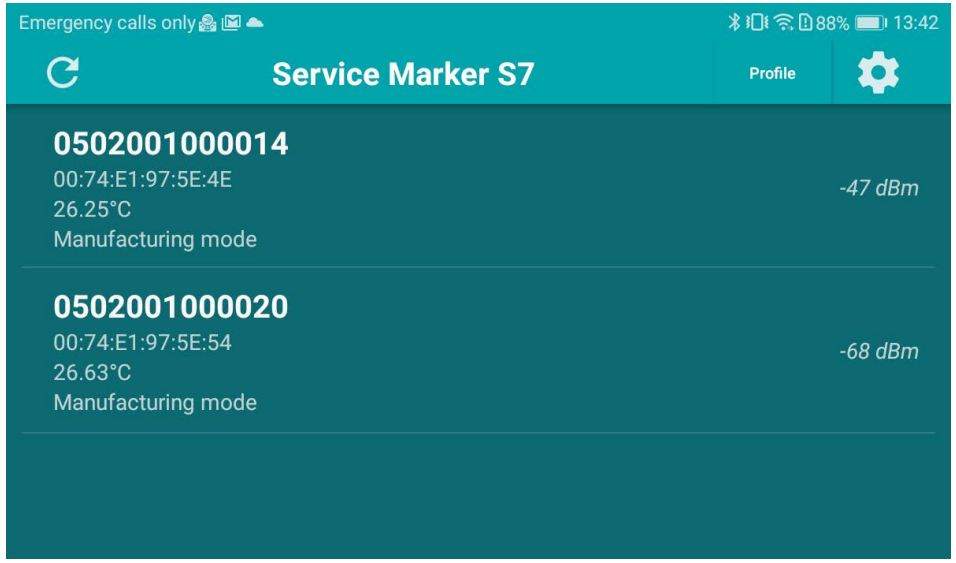
Specifications

Data transfer technology between a tag and a BLE receiver	Bluetooth 4.1
Number of tags that the BLE receiver identifies	2
Distance between the tag and the receiver, line-of-sight	up to 50 m
Distance between the tag and the receiver, metal partitions	up to 20 m
Estimated lifetime of the tag	not less than 5 years
Ingress Protection Rating tag/receiver	IP 68 / IP 40
Ambient temperature	–40 ... +85 °C





Tags operation monitoring on a smartphone



Tags operation is controlled using an Android smartphone / tablet via the **Service Marker S7** mobile app. The app is available on Google Play (request "Technoton").

The following information will be displayed:

- ✓ tag ID and MAC-address of the BLE-module ;
- ✓ signal strength;
- ✓ ambient temperature in the location the tag is mounted.

Compatibility with telematics units

ID system for attached equipment compatible with:

- ✓ CANUp telematic gateway;
- ✓ terminals with CAN-input, in which the parsing of CAN j1939 messages is configured.

TECHNOTON

Summary

- ✓ Wireless ID system based on Marker S7 allows identifying attached/hauling equipment, monitoring places and time of coupling/uncoupling, recording duration of equipment in use. Data is sent to a telematics system.
- ✓ Quicker tag installation with no wires, lower risk of intentional or occasional damaging. Built-in battery ensure 5 year operation.
- ✓ IP 68 body protects tag from dust and moisture and ensure operation in wide ambient temperature range.
- ✓ Data on equipment operation is converted to J1939 messages, allowing integration with telematics system over CAN J1939/71 interface.
- ✓ Keeping counters of onboard power network operation modes.

Learn more

Official web-pages	www.jv-technoton.com
More about S6 Technology	rd-technoton.com
More about IoT Burger Technology	rd-technoton.com
Document center	www.docs.jv-technoton.com
YouTube channel	/c/technotonen
Follow us in social media	/company/technoton
	/technoton