

Tag360-SBM is a Bluetooth Low Energy (BLE) “Smart Bike Module” intended as an add on attachment to vehicles, thus allowing the vehicles to be immobilised using associated Keyfob device, **TAG360-KF**, or via a mobile app.

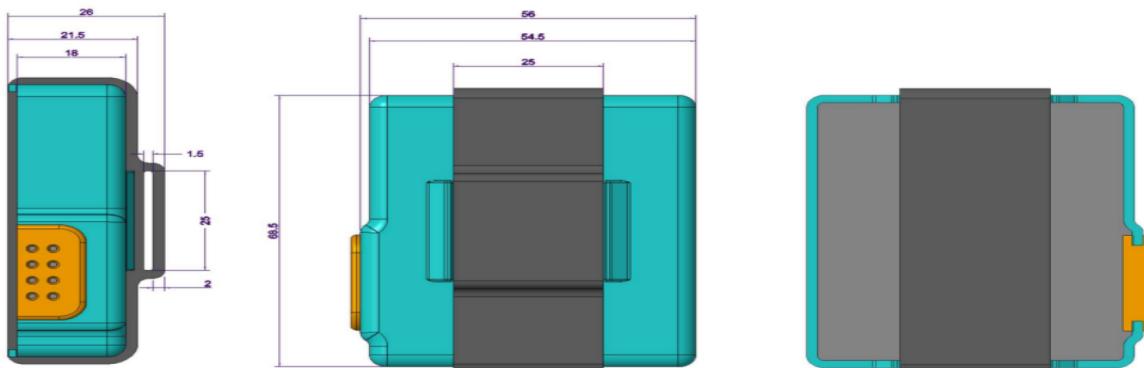
Tag360-SBM uses Bluetooth Low Energy (BLE) to get mobilise or immobilise commands from TAG360-KF, or from mobile app. These commands are passed on to vehicle’s engine control unit (ECU) via a digital bus, e.g. CAN. Tag360-SBM is powered by vehicle’s battery. A backup battery of 12V is provisioned within the unit.

Features

- BLE 4.2/5.0
- Secured via Authentication and (optional) 128b AES encryption

Applications

- Mobilise/Immobilise vehicle
- Enhanced vehicle security
- Last parked location



Specifications

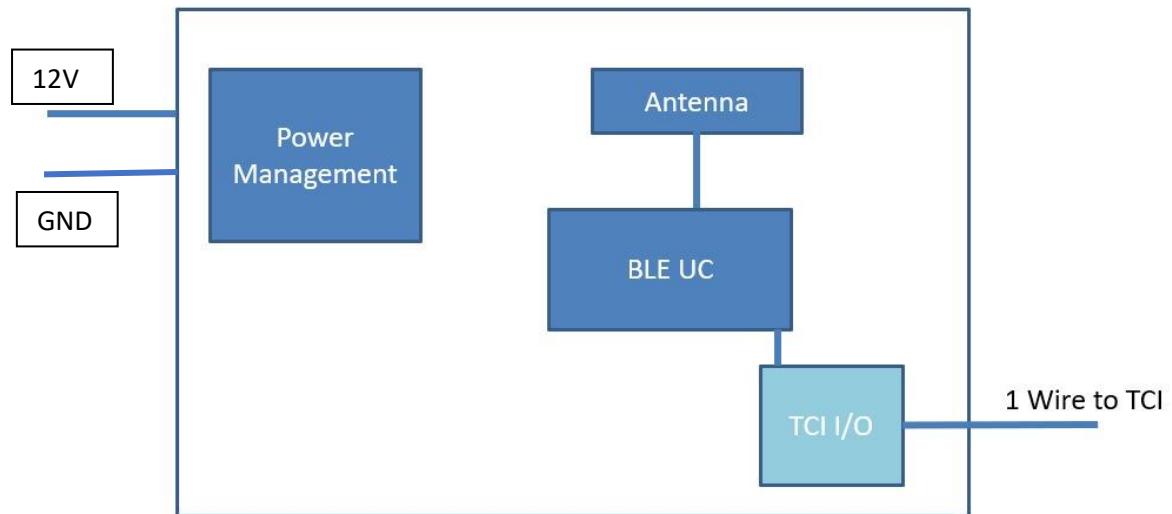
Electrical and Radio Specifications

Radio	Bluetooth Low Energy, BLE 5.0
Power	Vehicle 12V battery
Interface	Custom 1-wire interface to TCI unit

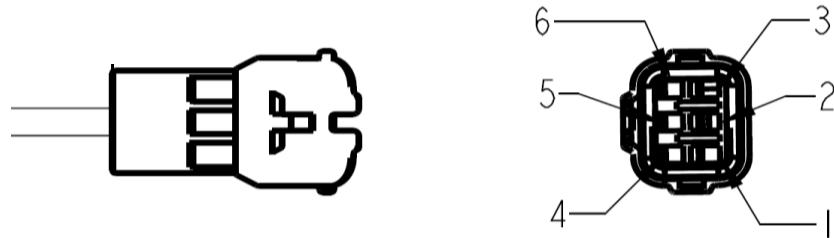
Mechanical Specifications

Dimensions	66.5mm*56mm*26mm
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Block Diagram



Connector Pinout

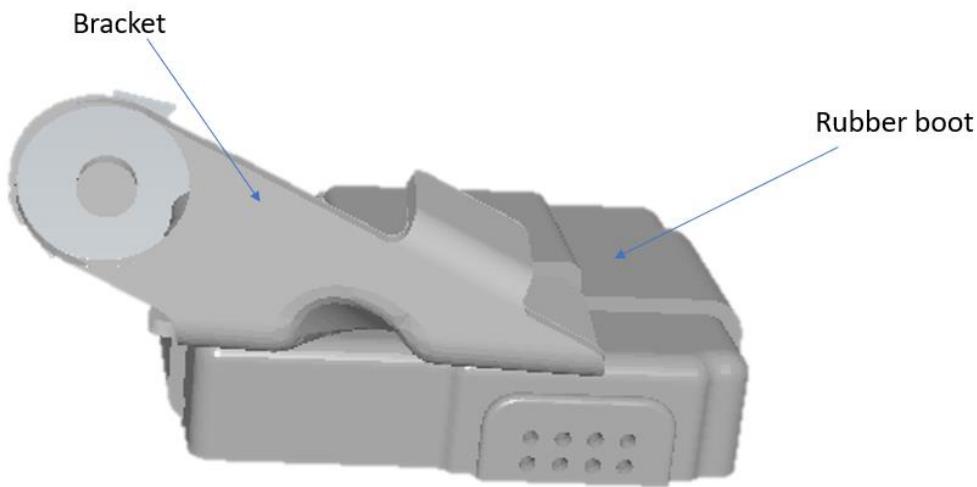


PIN #	DESCRIPTION
1	GROUND
2	NC
3	BATTERY
4	NC
5	TCI
6	IGNITION

Installation Instructions

Step1:

The SBM unit needs to be mounted on vehicle through its special clamp, as shown in drawing below. The clamp inserts into rubber boot, thus securing the SBM unit to the vehicle.

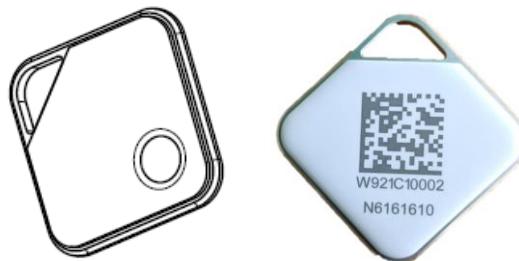


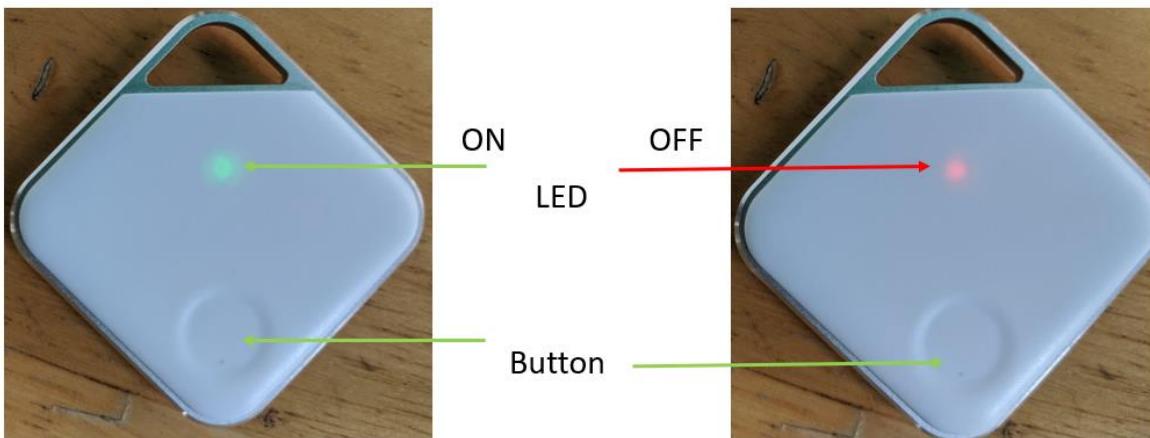
Step2:

Connect the SBI connector output to TCI Unit. The SBM connector output is a 6 pole Besmak connector-Male, which connects with corresponding 6-pole female connector of TCI unit.

Step 3:

The SBM unit is supplied with a pre-paired Tag360-K1 Keyfob unit. The unit has identification QR code on one side, while the functional LED and button press are provided on the back





After installation of SBM unit, the vehicle can be mobilised or immobilised via the keyfob unit.

Step 3.1: Turning on the vehicle

- a. Keyfob unit should be in Bluetooth range of the vehicle. It is recommended that the keyfob should be within 5 meters from the vehicle
- b. Insert physical key into the vehicle and turn the key ON
- c. Press Keyfob button for 1 second and wait for LED to glow. Once the green LED glows, the vehicle is mobilised
- d. Kickstart or press the ON button on vehicle to start the two wheeler

Step 3.2: Turning OFF the vehicle

- e. As soon as the vehicle is turned off through the physical key, the vehicle is immobilised automatically
- f. This can be further confirmed by button press. Once in vehicle Bluetooth range (recommended range is within 5 meters of vehicle), press the Keyfob button and wait for LED to glow. Once the LED glows red, vehicle is immobilised

If the key is already in the vehicle and in ON state, the button press is ignored. However, the SBM records the last command, and implements it as soon as key is turned OFF.

FCC WARNING NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a vehicular installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to another radio equipment or device, which can be determined by turning this equipment off through a plug-out, the user is encouraged to try to correct the interference by one or more of the following measures:

- Relocate the vehicle with the installed unit
- Increase the separation between the equipment and impacted unit
- Consult the authorised dealer or an experienced technician for help

This equipment must be installed and operated with a separation distance of at least 20 cm from all persons.

Regulatory Information

TAG360-SBM comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) these devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation.

Co-Location Warning Statement: These devices and their antennas must not be co-located or operating in conjunction with any other antenna or transmitter.