



# **MARQUARDT GE1 Body Controller Module Instructions**

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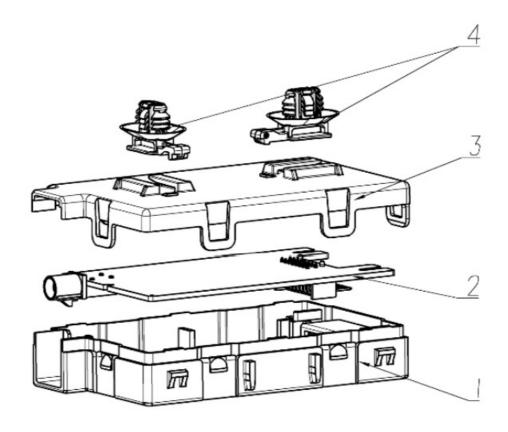
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# **MARQUARDT GE1 Body Controller Module**



# **Technical Description**



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• Original version: 04.01.2023

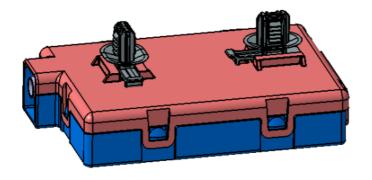
• Revision: 04.01.2023

• Version: 1.0

# **Functional description**

The GE1 (body controller module) is a component of a driving authorization system of a car which further comprises of the car key GK1, and the UWB anchor GU1. The components exchange encrypted data for car access, to start the engine, and to locate the key. The GK1 is the keyfob. The GK1 sends authorization data over Bluetooth LE to the control unit to execute the access request like Door lock/unlock. This device is not freely available on the market and is installed only by trained specialized personnel from the car manufacturer.

### **Outside View**



#### **Technical Data**

• Operating Voltage: 8 ~ 16v DC

• Operating temperature: -40 ~ +85 degree

• Rough mechanical dimensions: 107 \* 69 \* 20 mm

• Weight: 75 +/- 15g

# **Bluetooth LE parameters**

• Frequency 2402MHz ~ 2480MHz

• Bandwidth: 2MHz

• **Pavg**: -20dBm ~ 10dBm

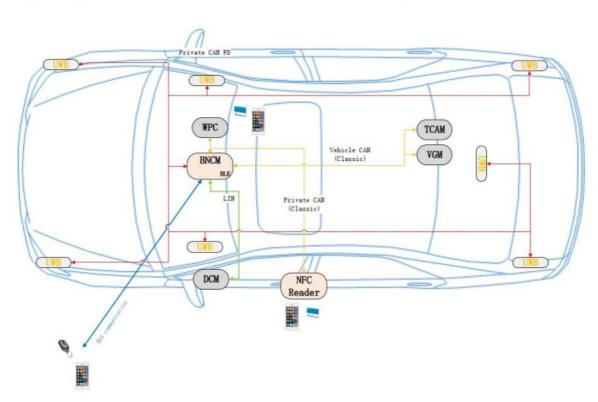
• Ppk-Pavg: 0 ~ 3dBm

Frequency offset: 0 ~ 150 kHz
Frequency Drift: -50 ~ 50 kHz

• Modulation Characteristics: 225 ~ 275 kHz



# Vehicle System Overview



#### **FCC Regulations**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used by 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 radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **FCC Caution:**

• Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

#### **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator & your body.

#### **ISED Notice**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. this device may not cause interference, and
- 2. this device must accept any interference, including interference that may cause undesired operation of the device.

#### **Radiation Exposure Statement**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **Documents / Resources**



# MARQUARDT GE1 Body Controller Module [pdf] Instructions

GE1 Body Controller Module, GE1, Body Controller Module, Controller Module, Module

#### References

• User Manual

#### Manuals+, Privacy Policy

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