## **Smart gateway 10Y Introduction**

### Hardware

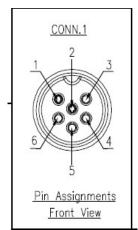
- Integrated with Nordic Bluetooth and ANT+ chip (Ceramic Antenna)
- Standard CAN BUS protocol

### **Overview**

The Smart gateway 10Y will collect all the necessary info from the e-bike system by CAN-bus, include the different assist mode, system error code and battery capacity by communication. After that, the Smart gateway 10Y as a master controller of the e-bike system, it can send the command to the e-bike system to change different assist mode and turn on/off light.

The Smart gateway 10Y extends the feature of an information hub, provides gather data from and configuration for, more integrated and more hidden with all critical functions, although adding an additional device, a clean handlebar, and more ergonomic design of remote button takes your E-bike riding experience to new levels. The E-bikes equipped with Smart Gateway 10Y can connect with the Giant E-bike App with ANT+ profiles by Nordic Bluetooth and ANT+ chip.

- 1. 36VDC as the power supply was a need.
- 2. The power-up process is that pulls the pin 4 to low by 500ms while SG10Y in the OFF state.
- 3. The led starting flashing with orange while SG10Y was started, and then the BLE and ANT+ enable both.
- 4. If the SG10Y enters error mode, the led will red flash or keep on.
- 5. The power-off process is that pulls the pin 4 to low by 3s while SG10Y in the ON state.



LED Color	LED state	Descriptions
Orange	Flashing	Normal mode
Red	Flashing	Flash Error
Red	Keep on	CAN IC Error
Green	Keep on	Power off

Pin assignments

**LED Descriptions** 

# **FCC** warning

#### **Federal Communications Commission Statement**

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- 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, pursuant to Part 15 of the Federal Communications Commission (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 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 causes 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 doing one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into 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 the equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **Radiation Exposure Statement:**

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.