

Bluetooth LE module (HN-BN02) User Manual

1. Product Information

This product is a BLE module sold by HUNATURE. It provides setting function according to user's purpose and can build various network according to the setting. It is possible to control individual or group by connecting to various devices, and it is possible to build low power control system through connection with sensor.

2. Description of operation

The BLE transceiver module receives a setup command from the user through a wired connection with a PC or a dedicated application for the purpose of using the product. This determines the operation mode of the module and receives the control command from the external terminal. As a terminal for module control, a smart device supporting BLE interface can be used, and this product can also be used as a terminal by user setting.

3. Product Specification

Items	Specification
Function	Radio frequency module. Bluetooth® standard Ver 4.1 Low Energy conformity
Application	Beacon, Dimmer, Sensor, Remote controller
Structure	Hybrid IC loaded with silicon monolithic semiconductor Compatible with industrial standard reflow profile for Pb-free solders Can meet with RoHS compliance (Pb, Cd, Hg, Cr+6, PBB, PBDE)
Size	19 x 15.5 x 2.2 mm
Input voltage	DC 3.3 V
Frequency range	2402 ~ 2480 MHz

4. Warranty and AS information

Warranty Year

If the product does not work, please ask for A / S on the contact below.

Brand Name: Hunature co.,ltd.

Address: 9-22, Pangyo-ro 255beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, Korea A Hall 903 (Woorim W-City)

Tel: 82-31-609-0703

Product name: BLE module

Model number: HN-BN02

Manufacturer / Country of Origin: Hunature co.,ltd. / Korea

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FCC REQUIREMENTS PART 15

Caution: Any changes or modifications in construction of this device which are not expressly approved by the responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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,

pursuant to Part 15 of the FCC Rules. These limits are designed to 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 radio or television reception, which can be determined by turning the radio or television off and on, the user is encouraged to try to correct interference by one or more of the following measures.

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on another circuit.
4. Consult the dealer or an experienced radio/TV technician for help.

The module is limited to OEM installation ONLY.

OEM integrators are responsible for ensuring that the end-user has no manual instructions to remove or install module.

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated. Additional testing and certification may be necessary when multiple modules are used.

In the users manual of the end product, the end user has to be informed to keep at least 20 cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied.

The end user has to also be informed that any changes or modifications not expressly approved by manufacturer could void the user's authority to operate this equipment.

If the labelling area is small than the palm of the hand, then additional FCC part 15.19 statement is required to be available in the users manual: This device complies with Part 15 of 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.

The final end product must be labeled in a visible area with the following "contains Transmitter Module FCC ID: 2AKXXHN-BN02

If the labelling area is larger than the palm of the hand, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of 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.

The module is limited to installation in mobile or fixed applications.

Separate approval is required for all other operating configurations, including portable configuration with respect to Part 2.1093 and different antenna configuration.