Dongle

Type V2

User Manual

Ubudu SAS
22 rue Tourlaque
75018 Paris

General

Ubudu donge type V2 is Bluetooth Low Energy device designed to work as USB device. It features USB A male connector and SMA RP female plug.

There are two recommended antennas to use with:

- omnidirectional BLU-ANT02TFF3SR
- directional YAGI Mobile12 HV

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Usage

Device is provided as plug and play. After connecting to USB port of any PC or MAC it enumerates itself as virtual COM port. Dongle is also compatible with Ubudu Gateway.

Functionalities

Ubudu USB dongle can act as BLE scanner, BLE data connectivity and dynamic BLE advertising (virtual beacon). Due to advanced communication protocol it can be configured according to user needs.

For more information please check Ubudu knowledgbase available at www.ubudu.com.

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22 rue Tourlaque
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Warsaw 03.04.2020

Technical documentation

Dongle

type V2

Person responsible

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RND team responsible for the design

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Device description

Dongle (type V2) has been designed for acting as Bluetooth - USB interface. The assumption was the greatest possible flexibility in using the device.

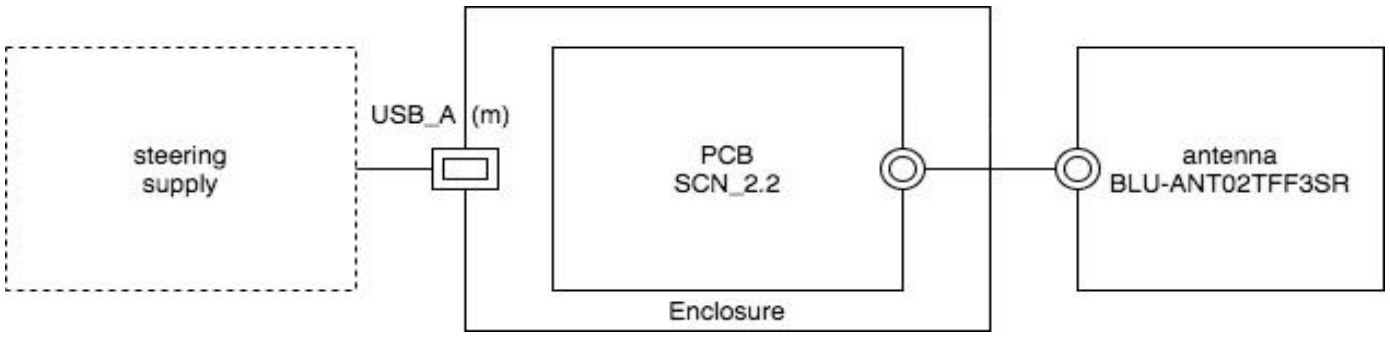
The device has been created with software currently available in several versions, none of which affects compliance with the essential requirements of the RED directive.

The device is intended for use with cable connections up to 3 m in length.

Specification

Specyfikacja	• Chip: nRF52840-QIAA • RF circuit design based on Nordic Semiconductors ref design: (http://infocenter.nordicsemi.com/index.jsp?topic=%2Fcom.nordic.infocenter.nrf52%2Fdita%2Fnrf52%2Fpdflinks%2Fref_layout .html) • supply: +4.4 : +5.3 [V] • working temperature: -10 : 40 [°C] • max humidity: 85% • max RF output power: 8dBm (according to datasheet) • output power range: 28dB • radio interface: Bluetooth 5.0 • working frequency: 2402 : 2480 [MHz] • number of channels: 40 (BLE specification) • size: 50x20x10 [mm] • powered from USB port • Reverse SMA antenna (m), model: BLU-ANT02TFF3SR/ YAGI Mobile12 HV

Block diagram of the device



Product photos

Label

The device is marked with following label:

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two cond itions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital d evice, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable prote ction against harmful interference in a residential installation. This equipment generates uses and c an 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 int erference will not occur in a particular installation. If this equipment does cause harmful interferen ce to radio or television reception, which can be determined by turning the equipment off and on, t he user is encouraged to try to correct the interference by 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 important announcement

Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.