

α Node User Manual

MODEL NO. 4AA-02E



Outlook

The α Node is built for commercial deployment.



Ultra-Low Power

A Bluetooth® 4.0 (Bluetooth® low energy) Nordic NFR51822 chip with ultra-low power consumption is used. Bluetooth low energy with intelligent energy-saving programs allows the beacon to work for three years on four AA batteries.

Easy Manage

A Sub 1Ghz RF chip is used to connect with a Base Station every few minutes, so you can config a Node in a very remote place by the a Base Station. Because the feature may consumes a few of electricity, we recommend set it to every 10 minutes.

Compatibility

Software and firmware are fully compatible with Apple's iBeacon and Google's Eddystone (include EID) technical requirements, and can be applied to systems including:

iOS 7.0 or above:

iPhone 4S, iPhone 5, iPhone 5S, iPad 3, iPad mini, iPad air.

Android 4.3 or above:

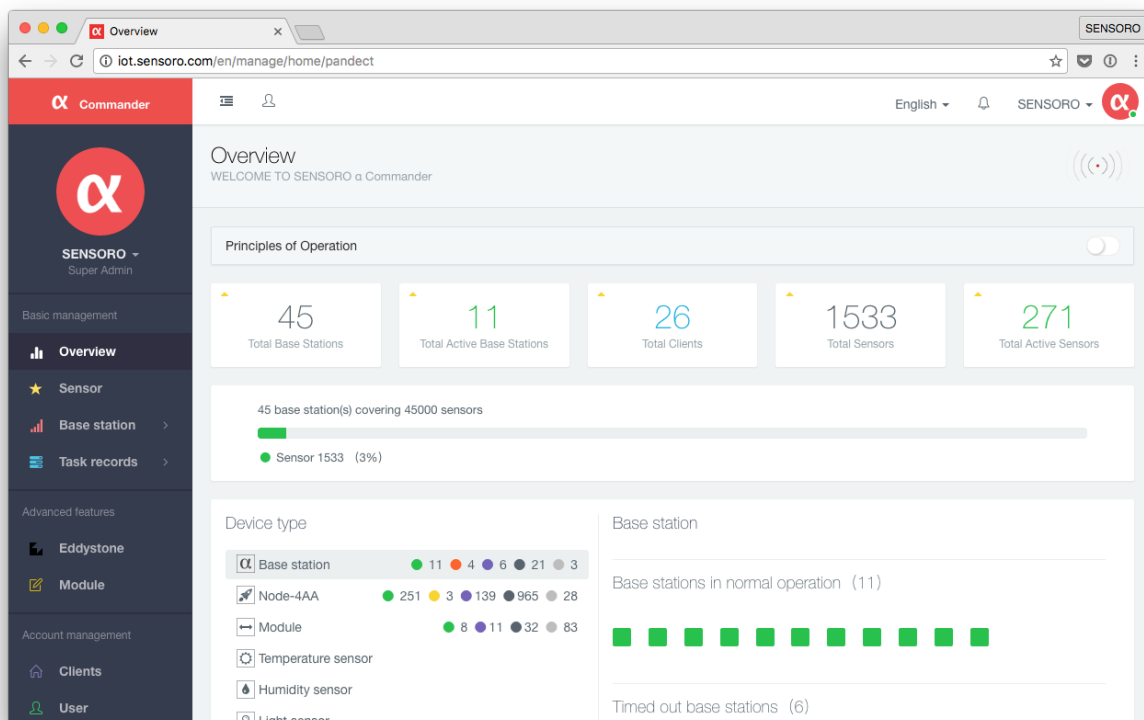
Samsung Galaxy S III, Galaxy S IV, Galaxy Note II, Galaxy Note III and Motorola RAZR, HTC ONE, etc.

Specifications

Property	Specifications
Chip	Nordic nRF51822
Dimensions	117 mm x 68 mm x 26 mm
Weight	140g
Material	White ABS
Protection	Dust/Shock Proof
Operating Environment	-20°C~+65°C 5%RH~90%RH
Storage Environment	-40°C~+80°C 5%RH~90%RH
Protocol Standards	Bluetooth 4.0 iBeacon and Eddystone Authorization
Upgrades	Supports over-the-air firmware upgrades
Security	Security Supports password access
Sensors	Temperature, Humidity, Light
LED	1 LED

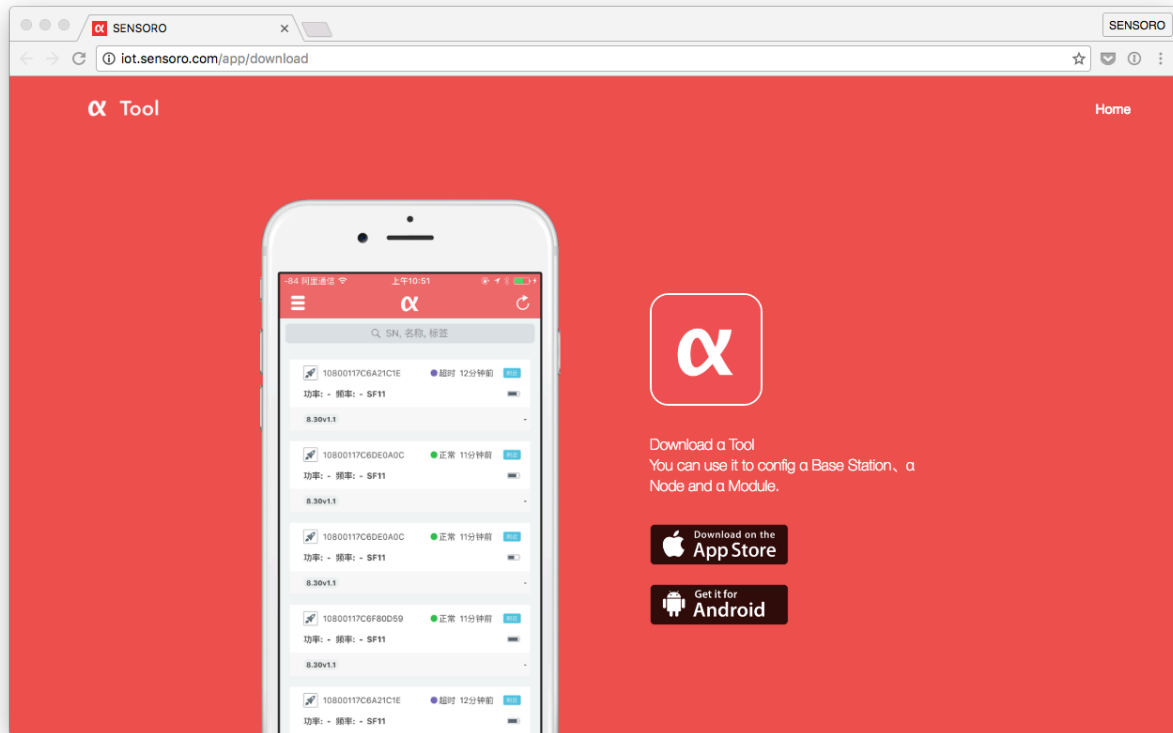
Emission Strength	+2dBm to +20dBm (Sub 1Ghz)
Transmission Distance	15cm to 100m (BLE) 1km to 10km (Sub 1Ghz)
Radio Frequency	100ms to 1285ms (BLE) 1min to 6hour (Sub 1Ghz)
Battery	No. 5 battery AA (4 batteries, not included)
Operation Life	3 years -8dBm/417.5ms (BLE) +14dBm/10min (Sub 1Ghz)

α Commander



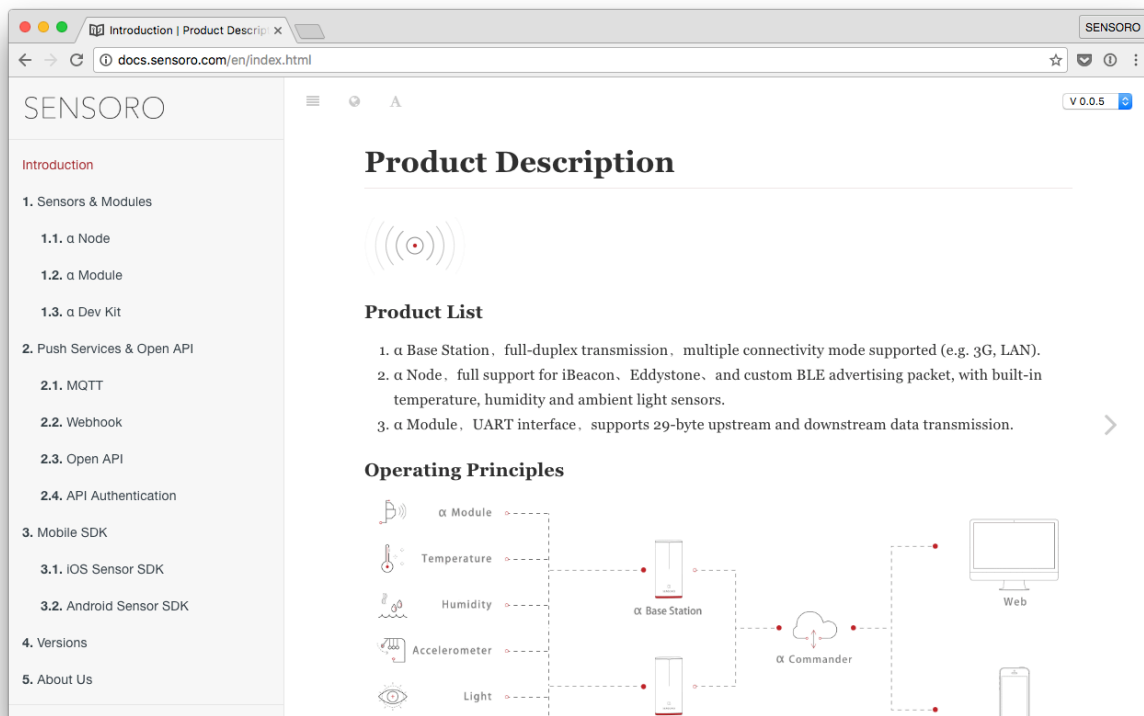
<http://iot.sensoro.com> .

α Tool



<http://iot.sensoro.com/app/download> .

Docs



<http://docs.sensoro.com> .

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CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS



RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

User has the choice to give his product to a competent recycling organization or to the retailer when he buys an new electrical or electronic

equipment.

FCC Statement

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.

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 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 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 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.

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

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC RF Radiation Exposure Statement Caution: To maintain compliance with the FCC's RF exposure guidelines, place the product at least 20cm from nearby persons.