

HA01 Indoor BLE Beacon Specification



1. Product Overview

The HA01 Indoor BLE Beacon is a wireless communication device featuring ultra-low power consumption, high stability, and flexible configuration.

It adopts a professional Bluetooth communication solution and supports key functions such as Beacon ID read/write and low battery detection.

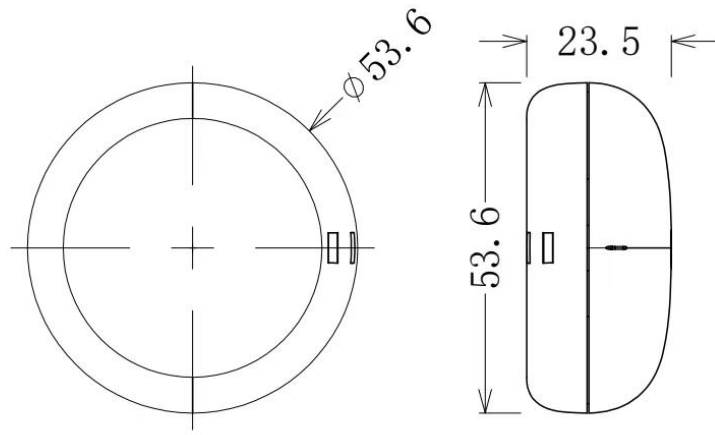
The product is widely used in indoor positioning, asset management, zone detection, and device interaction scenarios.

With easy deployment and strong compatibility, it is well suited for various indoor environments.

2. Key Features

- **Stable Wireless Communication:** With a transmission power of up to 6 dBm, the maximum line-of-sight communication range reaches 50 meters, ensuring stable signal transmission even in complex indoor environments.
- **Ultra-Low Power Design:** Optimized Bluetooth advertising mechanism with an average current consumption of only 86 μ A over 24 hours, delivering long battery life.
- **Flexible Parameter Configuration:** Supports Beacon ID read/write configuration. The broadcast device name is dynamically generated based on the MAC address, enabling easy identification and management.
- **Accurate Status Monitoring:** Built-in low voltage alarm. When the voltage drops below 3.2V, a low-battery status is automatically reported, allowing real-time power monitoring.
- **Easy Installation & Maintenance:** Powered by dual lithium thionyl chloride batteries. Simple installation with battery replacement possible without professional tools.

3. Product Dimensions



4. Technical Specifications

Items		Technical Specifications
Operating Environment	Operating Temperature	-10℃ ~ +50℃
	Operating Humidity	15%~90%RH , non-condensing
Wireless Communication	Antenna	Built-in Bluetooth Antenna
	Operating Frequency	2400MHz~2483.5MHz
	Data Rate	1Mbps
	Transmission Power	-20~+6dBm (adjustable)
	Advertising Interval	275ms (fixed)
Working Conditions	Power Supply	Battery Powered(2 Cells in Series)
	Battery model&Capacity	ER14250 (3.6V/1200mAh) *2
	Battery Life	Up to 2.5 years

5. Advertising Parameters

- Device Name : HALO_XXXX(XXXX represents the last four bytes of the device MAC address), Easily identifiable via Bluetooth scanning tools.
- Beacon ID : Readable and writable; configurable via professional tools for unique device identification and management.
- Tx Power : -20~+6dBm (adjustable), determines signal transmission strength; default supports maximum 6 dBm output.
- Low Voltage Alarm Threshold : 3.2V, automatically reports a low-battery flag when triggered.
- Compatible Tools : Supports mainstream Bluetooth scanning and configuration tools such as Siconnect, nRF Connect.

6. Power On/Off Instructions

Power On

The batteries are pre-installed at the factory. Simply remove the battery insulation tab between the battery and the device to power on. No additional operation is required.

Power Off

Insert the battery insulation tab back between the battery and the contact to power off the device.

7. Precautions

- 1). When the battery level is low, please replace the batteries in time. Ensure both batteries are installed in the same orientation and make proper contact. Reassemble the product correctly to avoid reduced or failed waterproof performance.
- 2). Under normal usage conditions, it is recommended to use lower transmission power and longer advertising intervals to extend battery life.
- 3). The product is splash-resistant only and does not support underwater operation.
- 4). Do not operate the product beyond the specified temperature range to avoid damage.
- 5). Avoid long-term exposure to direct sunlight during use to prevent housing aging.
- 6). Do not disassemble the main enclosure without authorization. Any damage caused by unauthorized disassembly is not covered by warranty.

FCC STATEMENT

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 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.

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

RF warning statement:

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

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.