



EU-Type Examination Certificate

APPLICANT

Shenzhen Zero Zero Infinity Technology Co., Ltd.

4th Floor, Qianhai E-metro Tower, Shenzhen-Hong Kong Cooperation Zone, Shenzhen, China

Manufacturer: Shenzhen Zero Zero Infinity Technology Co., Ltd.

4th Floor, Qianhai E-metro Tower, Shenzhen-Hong Kong Cooperation Zone, Shenzhen, China

Commercialised by (brand): HOVERAir

PRODUCT

AQUA Lighthouse

Type of product: ZZ-H-2-002

HW / SW: RC102_MB_V30 / 0.5.x

Description: The device is a AQUA Lighthouse with BLE, WLAN 2.4GHz, LORA 868MHz, and GNSS Receiver.

APPLICABLE REGULATION

Radio Equipment (RED)

Directive 2014/53/EU of the European Parliament and of the Harmonisation of the laws of the member states relating to the making available on the market of radio equipment.

Meet Essential Requirements

- | | |
|--|---------------------------------------|
| <input checked="" type="checkbox"/> Art. 3.1 (a) | <input type="checkbox"/> Art. 3.3 (e) |
| <input checked="" type="checkbox"/> Art. 3.1 (b) | <input type="checkbox"/> Art. 3.3 (f) |
| <input checked="" type="checkbox"/> Art. 3.2 | <input type="checkbox"/> Art. 3.3 (g) |
| <input type="checkbox"/> Art. 3.3 (d) | <input type="checkbox"/> Art. 3.4 |

This document is not valid without its technical annex, whose number matches with the number of this certificate. The evaluation of the technical documentation delivered is included in the technical file number: 26/37700450.

This Certificate is valid as long as there are no changes in the state of the Art indicating that the approved radio equipment can no longer meet the essential requirements of Directive 2014/53/EU and there are no notifications of the approved type that may affect the accordance with the essential requirements of Directive 2014/53/EU. Restrictions (if applicable): N/A.

The manufacturer, after the completion of the technical documentation, the conformity assessment procedures and the EU Declaration of conformity, may affix the CE Marking under his responsibility.

p.a.

Lluís Boada

Certification Technical Manager
Electrical & Electronics



LGAI Technological Center S.A. (APPLUS)
Notified Body No. 0370

Campus UAB. Ronda de la Font del Carme s/n
08193 Bellaterra, Barcelona (Spain)



Technical Annex

1. Model Description

1.1. General Information on the Equipment

Manufacturing country: China

Brand: HOVERAir

Commercial designation: HOVERAir

Country of commercialisation: European Union

Radio Service: BLE, WLAN 2.4GHz, LORA 868MHz, and GNSS Receiver

Application: AQUA Lighthouse

1.2. Features

The device is a AQUA Lighthouse with BLE, WLAN 2.4GHz, LORA 868MHz, and GNSS Receiver.

1.3. Software Version(s)

0.5.x

1.4. Hardware Version(s)

RC102_MB_V30

1.5. Other Components

Disposable Antenna?

Antenna Gain (dBi): n/a

Yes

No

Other assemblage (model, manufacturer, characteristics,..):

Battery:

Manufacturer: Jiangxi Mic-power New Energy Co.,Ltd.

Model: M782555

Specification: DC 3.85V, 1550mAh

1.6. Operating Frequencies and Maximum Power Emitted by Band

| Band | Service | Operational Frequency (TX) | Max. Power** |
|--------|------------------|--|--------------|
| Band 1 | Lora 868MHz | F_min: 868MHz F_max: 868MHz | 7.39dBm |
| Band 2 | Bluetooth LE | F_min: 2402MHz F_max: 2480MHz | 9.83dBm |
| Band 3 | WLAN 2.4GHz | F_min: 2412MHz F_max: 2472MHz | 13.95 dBm |
| Band 4 | GPS Receiver | F_min: 1575.42MHz F_max: 1575.42MHz | / |
| Band 5 | GLONASS Receiver | F_min: 1602MHz F_max: 1602MHz | / |
| Band 6 | GALILEO Receiver | F_min: 1575.42MHz F_max: 1575.42MHz | / |
| Band 7 | BDS Receiver | F_min: 1561.098MHz F_max: 1561.098MHz | / |

N/A: Not applicable

N/D: Not defined

** ERP for LoRa 868MHz, and EIRP for others.

1.7. Other Parameters of Radio Interface Acceptance Specifications (RI)

Requires licence / Use Authorisation:

- Yes
 No

2. Test Protocol

| Requirement | Standard/evidence | Laboratory | Report N° |
|---|--|---|---------------|
| Health and Safety Article 3.1(a) | EN IEC 62368-1:2020+A11:2020 | SHENZHEN STS TEST SERVICES CO., LTD | STS2512550A01 |
| | EN 50663:2017 EN 50566: 2017+A1:2023 EN IEC/IEEE 62209-1528:2021 EN 62479: 2010 | SHENZHEN STS TEST SERVICES CO., LTD | STS2512550H01 |
| EMC Article 3.1(b) | ETSI EN 301 489-1 V2.2.3 | SHENZHEN STS TEST SERVICES CO., LTD | STS2512550E01 |
| | ETSI EN 301 489-3 V2.3.2 | | |
| | ETSI EN 301 489-17 V3.3.1 | | |
| | ETSI EN 301 489-19 V2.2.1 | | |
| | EN 55032:2015+A11:2020 | | STS2512550E03 |
| | EN 55035:2017+A11:2020 | | |
| Efficient use of Radio spectrum Article 3.2 | ETSI EN 300 328 V2.2.2 | SHENZHEN STS TEST SERVICES CO., LTD | STS2512550W01 |
| | ETSI EN 303 413 V1.2.1 | | STS2512550W02 |
| | ETSI EN 300 220-1 V3.1.1 | | STS2512550W03 |
| | ETSI EN 300 220-2 V3.2.1 | | STS2512550W04 |

3. Restrictions (if positive)

- Yes
 No

4. Activities carried out by the Notified Body (NB)

Technical Documentation Review

- | | | |
|---|---|--|
| <input type="checkbox"/> Assembly drawing(s) | <input checked="" type="checkbox"/> Block Diagram | <input checked="" type="checkbox"/> Circuit diagram / schematics |
| <input checked="" type="checkbox"/> External photographs | <input checked="" type="checkbox"/> Label drawing/location | <input checked="" type="checkbox"/> User manual |
| <input checked="" type="checkbox"/> Internal photographs | <input checked="" type="checkbox"/> Operational description | <input checked="" type="checkbox"/> Risk Assessment |
| <input checked="" type="checkbox"/> Test set-up photographs | <input checked="" type="checkbox"/> Test reports | <input checked="" type="checkbox"/> EU declaration of conformity |
| <input checked="" type="checkbox"/> Bill of Materials | <input checked="" type="checkbox"/> PCB layout | |
| <input type="checkbox"/> Installation diagrams and explanations | <input checked="" type="checkbox"/> List of applied (harmonized and non-harmonized) standards | |

Other Activities:

- RIS
- EFIS/CNAF
- Review Technical Justifications
- Analysis Report
- EU type certification issued

5. Additional Information

Radio Equipment Directive 2014/53/EU, Article 10.4: Manufacturers shall keep the technical documentation and the EU declaration of conformity for 10 years after the radio equipment has been placed on the market.

Radio Equipment Directive 2014/53/EU, Annex III, Module B.7: The manufacturer shall inform the notified body that holds the technical documentation relating to the EU-type examination certificate of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of this Directive or the conditions for validity of that certificate. Such modifications shall require additional approval in the form of an addition to the original EU-type examination certificate.

This review includes draft standards, deviations from the standards and technical justification for compliance.