Datasheet

Digital Broadcasting Device
Model: P1

CONTENTS

BRIEF INTRODUCTION

P1 is a robust beacon with Bluetooth® LE 5.0 and IP68 waterproof & IK09 shockproof, mostly used for asset management & resources locating in harsh environments including cold rooms, warehouses, railroad systems, etc. Also, it works at the temperature of -40℃ ~ 85℃ because of its great performance and material.
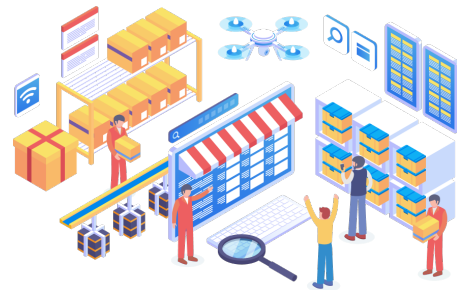
KEY FEATURES

- Bluetooth® LE 5.0 & nRF52 Series
- IK09 Shockproof
- High tolerance of extreme temperatures: -40 ℃ ~85 ℃
- Magnetic switch
- Replaceable battery
- IP68 waterproof & dustproof
- More than 3 years service life

MARKET APPLICATIONS

Smart Logistic

Cold Chain Monitoring

Warehouse Management

P1 Digital Broadcasting Device

APPLICATION SCENARIOS

Asset Management & Efficiency Improvement

Cooperating with the G1 gateway or customer's gateway, the users can track the asset including materials, forklifts, and handling tools, etc, to save searching time.

Transportation Tracking & Food-quality Assurance

P1 also can be used for logistic tracking, for example, based on the customer's technology development, users can real-time detect the temperature in the vehicle to keep the food fresh.

DEVICE SPECIFICATIONS

BASIC PARAMETERS

Item	Value	Remarks
Material	PC	Null
Color	Black	Null
Protection	IP68, IK09	Null
Dimensions（L＊W＊H）	69.6 * 47.6 * 24 mm	Null
Net weight	52.2 g	Battery included
Battery	1 Lithium battery	1200 mAh capacity
Battery lifetime	44 months	by default
Chip model	nRF52 series	Null
Bluetooth standard	Bluetooth® LE 5.0	Null
Bluetooth protocol	iBeacon & Eddystone & sensor data	Sensor data available if a sensor included
Configuration app	BeaconSET+	Null
Operating temperature	-40℃ ~ 85℃	Anti-high & Low-temperature
NFC	No	Null
LED	Yes	Null

DEFAULT BROADCASTING PARAMETERS

Type	Item	Default Settings
iBeacon	UUID (16 bytes)	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0
	Major (2 bytes)	0
	Minor (2 bytes)	0
	Measured power	-59 dBm (0xC5)
	Tx power	0 dBm
	Interval (ms)	900 ms
UID (on)	Instance ID	Random
	Namespace ID	Random
	Measured power	-24 dBm (0xE8)
	Tx power	0 dBm
	Interval (ms)	2000 ms

DEFAULT BROADCASTING PARAMETERS

Type	Item	Default settings
URL (off)	URL	http://www.minew.com/
	Measured power	-24 dBm (0xE8)
	Tx power	0 dBm
	Interval (ms)	2000 ms
TLM (on)	Electricity mV	By default
	Boot-time	By default
	PDU packets	By default
	Measured power	-24 dBm (0xE8)
	Tx power	0 dBm
	Interval (ms)	2000 ms
INFO (on)	Device name	P1 Plus
	Electricity	By default
	MAC address	Factory setting
	Measured power	-24 dBm (0xE8)
	Tx power	-8 dBm
	Interval (ms)	4000 ms
Sensor (on)	Sensor data	Accelerometer, temperature sensor supported
Password	minew123	By default and configurable
Connectable	Yes	It is configuration mode

Note：Temperature sensor and Acc are excluded for P1 version, please contact our sales teams for more details

COMPATIBILITY

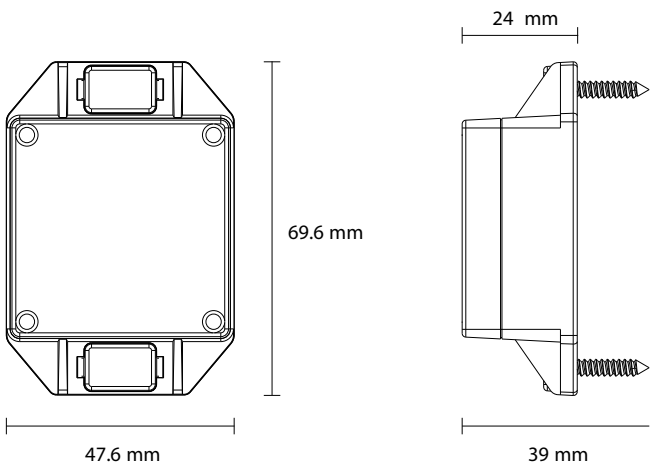| SYSTEMS SUPPORT	VERSION SUPPORT
Bluetooth® LE	Bluetooth® LE 4.2 and above
iOS 10.0 and above	iPhone 6/ 6 Plus/ 6S/ 6S Plus/ 7/ 7 Plus/ 8/ 8 Plus/ x/ xr/xs /xs max /11 /11 pro/11 pro max, iPad mini/ mini 2/ 4/ Air/ Pro, etc.
Android 4.3 and above	SAMSUNG, XIAOMI, HUAWEI, ONEPLUS, VIVO, OPPO, etc.

PRODUCT APPEARANCE

24 mm

69.6 mm

47.6 mm

39 mm

INSTALLATIONS

Methods: Double-side adhesive tape & Screw bracket installation

1 Double-side adhesive

Recommended Installation Environment:

The material surface should be Aluminum, galvanized steel, enamel steel, stainless steel, ceramic, glass/epoxy resin, acrylic, PBT, ABS, PC, hard PVC, etc.
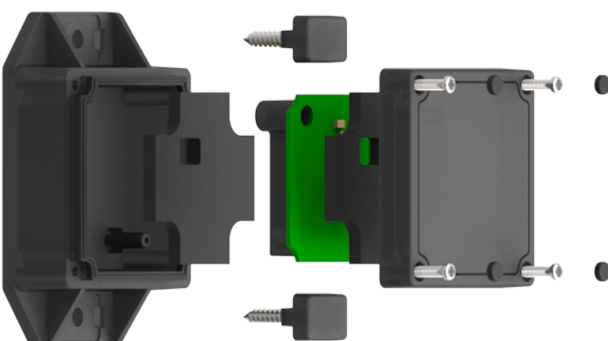
Temperature Range:

10℃ ~ 75℃

Requirements:

No dust on the material surface and clean it before installation. Before pasting, increasing the viscosity with a hairdryer, or sticking it over half-hours at a reasonable temperature and then pressing for 2 seconds and repeat for better stability.

Best Temperature:

21℃ ~ 38℃，use in a low-temperature

PRODUCT DETAILS

2 Screw installation notes

Recommended Installation Environment: Screws installation should be on a hard surface, such as a wall where is not loose.

Temperature Range: -40℃ ~ 85℃

Detail Steps:

First step: drill screw holes on the surface of a hard surface to be installed.

Second: put the green expansion plug into the screw holes on the hard surface to be installed.

The Last: put the screws into the green expansion plug, and install the product in the direction of screw holes.

Cautions

- In a humid environment, the product needs to be installed according to its waterproof grade, and should avoid soaking for a long-time.
- Bluetooth® LE beacons should be installed away from obstacles and corners.
- If users need to replace the battery, please do check the polarity of batteries and battery- socket before assembly.
- Please avoid direct sunshine so that damages the shell and affects the shockproof grade.
- **Turn-On:** The blue LED will be on for 3 seconds to turn it on when a magnet closing to the switch position;
- **Turn-Off:** The blue LED will flash for 5 seconds to turn it off when a magnet closing to the switch position.
- The red LED will flash and also show the battery information when it is low-battery.
- The product is switched off by default when shipping. Different scenarios have different deployments. For example, in indoor environments, the product can be deployed in the center (narrow) or in a triangular grid way (open). For corridors, P1 can be deployed in a line or double rows (wider) in the central. For the higher floors. Do not deploy on the ceiling. Install along the wall or near the ground according to the appropriate spacing. In an outdoor open area, P1 can be installed in a triangular grid way **(P1 without sensors inside).**
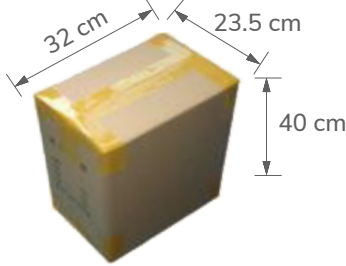
Picture1 Installation reference
The blue icon demonstration is correct

Notes

The suggestion above is just as a reference, users should install products according to their actual situation, test results and positioning algorithm capability.

PRODUCT PACKAGE

Items	Inner box (battery included)	Outer box (battery included)
Package	30.5 cm / 11 cm / 7.2 cm	32 cm / 23.5 cm / 40 cm
Quantity	12 units/ box	120 units/ box
Net weight	626.5 g/ box	6.3 kg/ box
Gross weight	755 g/ box	8.1 kg/ box

CERTIFICATIONS

- iBeacon MFi License (iBC-14-00582)
- FCC Regulation (FCC Part 15.)
- CE Regulation(Included)
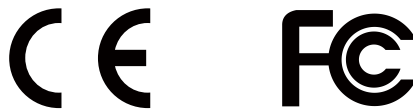
QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (testings include transmission power, sensitivity, power consumption, stability, aging, etc.).

Warranty Period: 12 months from the date of shipping (Battery and other accessories excluded).

DECLARATION

Rights Statement

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Disclaimer

Minew team reserves the right to the final explanation of the document and product differences. The Minew group is not responsible for liability of property or personal injury with the wrong operation if users develop related products without viewing the technical specifications of this manual.

FCC Requirement

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

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 residentialinstallation. 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 interferencewill 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 towhich the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.