



**Technoration India Pvt. Ltd.**

# Datasheet

**Pallet Beacon**  
**Model: TRB01**



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## BRIEF INTRODUCTION

TRB01 with nRF52 series chip and supporting BLE 5.0 protocol is a low-consumption beacon for pallet and crate tracking; it is easily installed on the trailer or forklifts due to its special design. Besides, based on the indoor positioning technology, the product can help industries including factory manufacturing and warehouse management to achieve digital and visual management on assets.

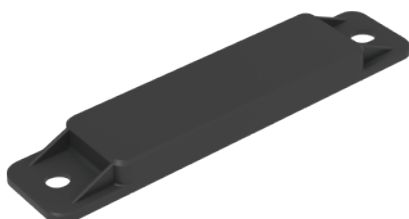
## KEY FEATURES

- BLE 5.0 & nRF52 Series
- 40 Months of Service Life
- Accidental Shutdown Prevention
- IK08 Shockproof
- IP65 Waterproof & Dustproof
- 100m Broadcasting Distance

## MARKET APPLICATIONS

Smart Warehouse Management  
Smart Industrial Manufacturing

TRB01



## APPLICATION CASES



### Assets Tracking & Processes Optimization

With gateways and relative software development, users can quickly track the movement and location of assets, such as pallets or crates, in the warehouse; also, it can help users store all assets or order information digitally, without the need for time-consuming paperwork; besides, it helps users identify unnecessarily queuing of working progress for processes improvement.



### Device Tracking & Productivity Improvement

Based on the Bluetooth location technology, TRB01 can be installed on the trailer or forklifts, and users can quickly locate the tools or devices for searching efficiency; also, users could track where time is wasted taken by workers and improve the manufacturing layout system.

## DEVICE SPECIFICATIONS

### BASIC PARAMETERS

Item	Value	Remarks
Material	ABS	Null
Color	Black/Grey	Null
Protection	IP65 IK08	Null
Dimensions (L*W*H)	116.1*25.2*9.2mm	Null
Net Weight	19g	Battery included
Battery	1 pc CR series battery pack (2 pcs units included)	440mAh capacity
Battery Lifetime	40 months	By default
Chip Model	nRF52 series	Null
Bluetooth Standard	BLE 5.0	Null
Bluetooth Protocol	iBeacon & Eddystone	Null
Configuration App	BeaconSET +	Null
Sensors	No	Null
NFC	No	Null
LED	No	Null
OTA	No	Null
Operating Temperature	-20~60 °C	Null

### DEFAULT BROADCASTING PARAMETERS(BEACONPLUS FIRMWARE)

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



## DEFAULT BROADCASTING PARAMETERS

Type	Item	Default Settings
URL(Off)	URL	http://www.technoration.in/
	Measured power	-24dBm (0xE)8
	Tx power	0dBm
	Interval(ms)	2000ms
TLM(Off)	Electricity mV	By default
	Boot-time	By default
	PDU packets	By default
	Measured power	-24dBm (0xE)8
	Tx power	0dBm
INFO( On )	Interval ( ms )	4000ms
	Device Name	TRB01
	Electricity	By default
	MAC address	Factory setting
	Measured power	-24dBm (0xE)8
Sensor (Off)	Tx power	-8dBm
	Interval ( ms )	4000ms
Password	Sensor Data	No
Connectable	technoration123	By default and configurable
	Yes	It is configuration mode

## COMPATIBILITY

### SYSTEMS SUPPORT

iOS 10.0 and above

Android 4.3 and above

### VERSION SUPPORT

iPhone 6/6Plus/6S/6S Plus, iPhone 7/7Plus,  
iPhone8/8 Plus, iPhone x/xr/xs/xs max,  
iPhone 11/11 pro/11 pro max,  
iPad mini/mini2/4/Air/Pro, etc.

SAMSUNG, MIUI, HUAWEI, ONEPLUS, VIVO, OPPO, etc.

## PRODUCT DETAILS



### ② Screw installation notes

**Recommended Installation Environment:** Screws installation should be considered on the wooden pallet, iron shelf, etc.

**Screw Temperature Range:**

-20 ~ 60℃

**Detail Steps**

**First step:** drill screw holes on the surface of a hard surface.

**Second:** put the green expansion plug into the screw holes on the hard surface.

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

**Notes**

The diameter of the screw hole is 6mm; the installation above is only as a reference; users should install the product according to the actual situation.

## CAUTIONS

- The product is designed with no button and switched on when shipping for avoiding the false trigger, and it also cannot be switched off by configuration app until the battery is exhausted.
- In a humid environment, the product needs to be installed according to its waterproof grade, and should avoid soaking for a long-time.
- BLE beacons should be installed away from obstacles and corners.
- It is not recommended users turn on all broadcasting frames for a long service life.
- It would be damaged by using over the normal operating temperature.
- Please avoid the direct sunshine so that damages the shell and affects the shockproof grade
- The Technoration group will not be responsible for the damage or injury by illegally dissembling the main body.

## 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.

**3M Tape 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 sticking temperature:**

21 ~ 38℃

## PRODUCT PACKAGE

Items	Inner Box ( Battery excluded )	Outer Box ( Battery excluded )
Package		
Quantity	36 Pcs/box	360 Pcs/box
Net Weight	684g/box	6.84kg/box
Gross Weight	762g/box	8.1kg / box

## CERTIFICATIONS

- CE Regulation(Included)
- RoHS 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

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