PRODUCT SPECIFICATION

BT 5.0 Temperature and Humidity Sensor Beacon S1

Product Name	BT 5.0 Temperature and humidity sensor beacon S1
Ordering Code	S1-6002A (221010003), standard version
	S1-6004A (221010005), external 1-meter length wire type temperature and humidity probe
	S1-6010A (221010011), with accelerometer sensor
Firmware Version	V1.1.0 (MiniBeacon Plus Intelligence Firmware)
Hardware Version	V1.0.1 (BT5.0)
Configuration App	BeaconSET+ (iOS & Android)
SDK Kits	Available
Cloud Management Platform	http://iot.beaconyun.com
Certification	CE & FCC & Bluetooth®®® EPL certification
Launched Time	October-25-2016
Remarks	1. Updated the configuration App
	2. Updated firmware, 12.2017
	3. Updated cloud management platform, 04.2018
	4. New model S1-6004A which used external wire type T & H sensor,05.2018
	5. Passed the Bluetooth®® EPL certification, 03.2019

1. INTRODUCTION

More than waterproof and portable, S1 is one type of high precision Bluetooth® 5.0 temperature and humidity indicator (thermo-hygrometer) and data logger. It can convert the environmental temperature and humidity into correspondent digital signal. By connecting to wireless network via Blueooth® & WiFi gateway G1, it can upload temperature and humidity data to local server or remote cloud platform. Selected high quality integrated digital temperature and humidity chip sensor is used for S1, which ensures the transmitter's good long-term stability, low latency and ability to resist chemical contamination, thus possessing excellent repeatability.

2. ADVANTANGE

- IP65 waterproof level
- Over 100 meters broadcasting range
- 3 years battery lifetime
- Max. storage 200 history records
- Ultra-low power consumption Bluetooth® 5.0 chipset nRF52832
- High-accuracy digital temperature and humidity sensor inside
- Very fast start-up and measurement time
- Real-time data converting, storing and uploading
- Excellent security mechanism
- Supporting the customization service such as logo, firmware and other

3. OVERVIEW

Front View   Side View   Inside Structure

4. APPLICATION

It can be used to measure environmental temperature and humidity in fields such as industrial inspection, civil inspection, machine manufacture, environmental protection and metering so on. So its application occasions cover: laboratory, clean workshop, collection place, home, agricultural greenhouse, weather station, national defense and science research, posts and communications, tobacco, chemistry and engineering, environmental protection, archive and library, server room, storage, medical treatment and public health, hotel, food storeroom, and grain reserve.

5. PHYSICAL PROPERTY

Model	S1
Waterproof Level	IP66
Case material	ABS
Case color	White
Product size	70.6*38*17.8mm
Unit weight	43.0g
Operation Voltage	1.8 – 3.9Vdc
Data Indication	N/A, need to access data by configuration app or Bluetooth® gateway G1
Transmission Range	Max. 100m in open space
Accessory	Double-sided adhesive

6. TECHNICAL PARAMETER

Item		Value	Error range
Temperature Measurement	Range	-40℃~60℃	depends on battery working environment
	Measurement Accuracy	0℃~60℃	±0.5℃
		≤0℃ OR ≥60℃	±1℃
	Resolution	0.05℃	---
Humidity Measurement	Range	0%RH~100%RH	
	Measurement Accuracy	0%RH~90%RH	±5%RH
		≤0%RH OR ≥ 90%RH	±7%RH
	Resolution	0.05%RH	---
Accelerometer Measurement	Range	-40℃~70℃	
	Measurement Accuracy	+/-2g	Adjustable by firmware
Sampling Period	---	Once per second	Temperature & humidity & accelerometer

7. ELECTRICAL PROPERTY

Static Current	<3uA（power consumption under power-off status）
Peak Current	<5.3mA
Average Current	<35uA (don't include power consumption on data transmission)
Battery Type	2*FR03 Li-Fe battery
Battery Capacity	1100mAH
Lifetime	3 years

8. ENVIRONMENTAL PROPERTY

Working temperature	-40℃~+70℃
Storage temperature	10℃~+25℃，≤65%RH

9. PACKAGE

Details	Mini Box	Package Box	Carton
Quantity (S1)	1pc per gift box	12pcs per package box	120pcs per carton
Net Weight	0.037kg	0.45kg	4.5Kg
Gross Weight	0.04Kg	0.76Kg	8.1Kg
Size	10.5 x 6.5 x 2.5 cm	30.5 x 11 x 7.5 cm	32 x 23 x 40 cm

FIRMWARE FLASH

1. J-LINK Programmer Kit;
2. Programming ports definition;

Please contact MINEW sales team to ask more related information if needed.

DECLARATION

The contents of this datasheet are subject to change without prior notice for further improvement. Minew team reserves the right to explain all the terms of this datasheet.

CONTACT

Manufacturer: Shenzhen Minew Technologies Co., Ltd.
Phone: +86 (755) 2103 8160
Email: info@minew.com
Address:

3rd Floor, I Building, Gangzhilong Science Park,
QingLong Road, Longhua District,
Shenzhen 518109
China

https://www.minew.com

<END>