

# SPECIFICATION

Customer : \_\_\_\_\_

Customer's Model No. : \_\_\_\_\_

Model No. : **SG800BT** Wireless Linear Imager Bar Code  
Scanner Series  
\_\_\_\_\_

Date : \_\_\_\_\_

Sample Serial No. : \_\_\_\_\_

Spec. Version & Revision Date: V00 2019.01.15  
\_\_\_\_\_

Received/Approved by



[Http://www.champtek.com](http://www.champtek.com)

E-mail : [sales@champtek.com](mailto:sales@champtek.com)

ChampTek Incorporated

5F, No. 2, Alley 2, Shih-Wei Lane, Chung Cheng Rd.,  
Xindian District, New Taipei City 231, Taiwan

TEL : 886-2-22192385

FAX : 886-2-22192387

## Revision History

Version	Date	Context
V00	2019.01.15	Release

SPECIFICATION..... 1

- A. General Description ..... 4
- B. Physical Characteristics ..... 5
- C. Electrical Characteristics..... 8
- D. Performance ..... 9
- E. Environmental..... 9
- F. Readable Symbologies ..... 10
- G. Scan Map..... 11
- H. Reliability..... 11

## A. General Description



SG800/SG801 (wired) / SG800BT(wireless) is a brand new gun-type area imager bar code scanner, has most modern design with rugged casing and supports IP42 sealing protection, which is designed especially for retail, logistic and warehousing management market. We include friendly functions with replaceable multi-interface cable options that makes it more easily to be operated by the customers to accommodate to user environment. An optional stand can be ordered to facilitate hand-free reading application.

SG800BT has most modern design with its auto-shuttle-emulation alike smart detection, offers superior decoding performance on a reading speed up to 500 scans per second and up to 500mm reading depth for the majority of 1D bar codes and GS1 DataBar™ codes.

SG800BT's out of range or batch transmission mode with memory capacity stores up to 30,000 inputs of EAN13 barcodes. Wireless scanner and cradle equipped Class1 Bluetooth V2.1 EDR technology with transmission range up to 80m/262.47 ft. in line of open sight, supports both SPP and HID profiles can easily pair up with other Bluetooth compatible mobile equipments.

With its Intelligent Activation, it automatically switches over from button trigger mode to auto-sense mode while placing scanner on its stand or charging cradle.

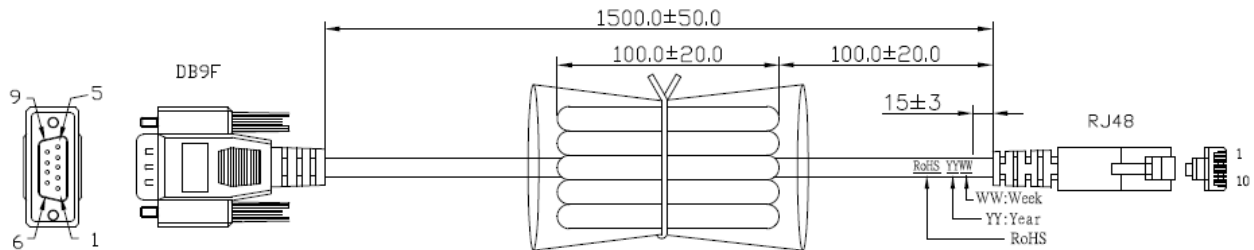
SG800/BT is a high performance barcode scanner which provides customers with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retail and logistic environment.

## B. Physical Characteristics

<b>Weight</b>	
Body weight	Approx. 165g / 5,83 oz
<b>Material</b>	
	ABS / Rubber
<b>Cable Length</b>	
	5FT. ( 150cm )
<b>Connector</b>	
	RJ 45C 10Pins
<b>Dimension</b>	
	73.5 mm W x 76.2mm H x 173 mm L
<b>Color Available</b>	
	Black

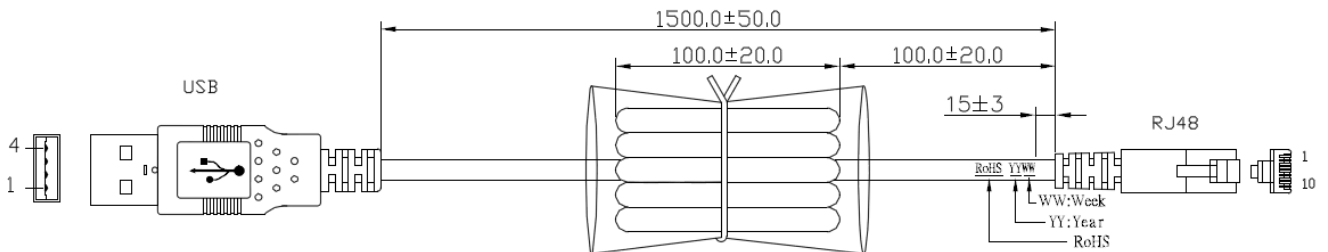
### a. Cable drawing (Unit:mm)

#### (1) RS232



DB9F	RJ48	FUNCTION	COLOR
5	3	GND	Brown
9	5	DC +5V	Red
2	7	TXD	Orange
3	9	RXD	Yellow
8	1	RTS	Green
7	10	CTS	Blue
Shell		Spiral	

#### (2) USB



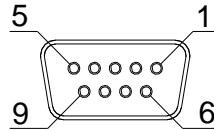
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	6	D-	Green
3	8	D+	Blue
4	3	GND	Brown
Shell	3	SHIELDING	

**b. Pin Assignment**

**(1) RS-232 Interface**

**DB 9 Female**

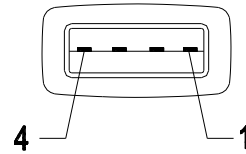
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



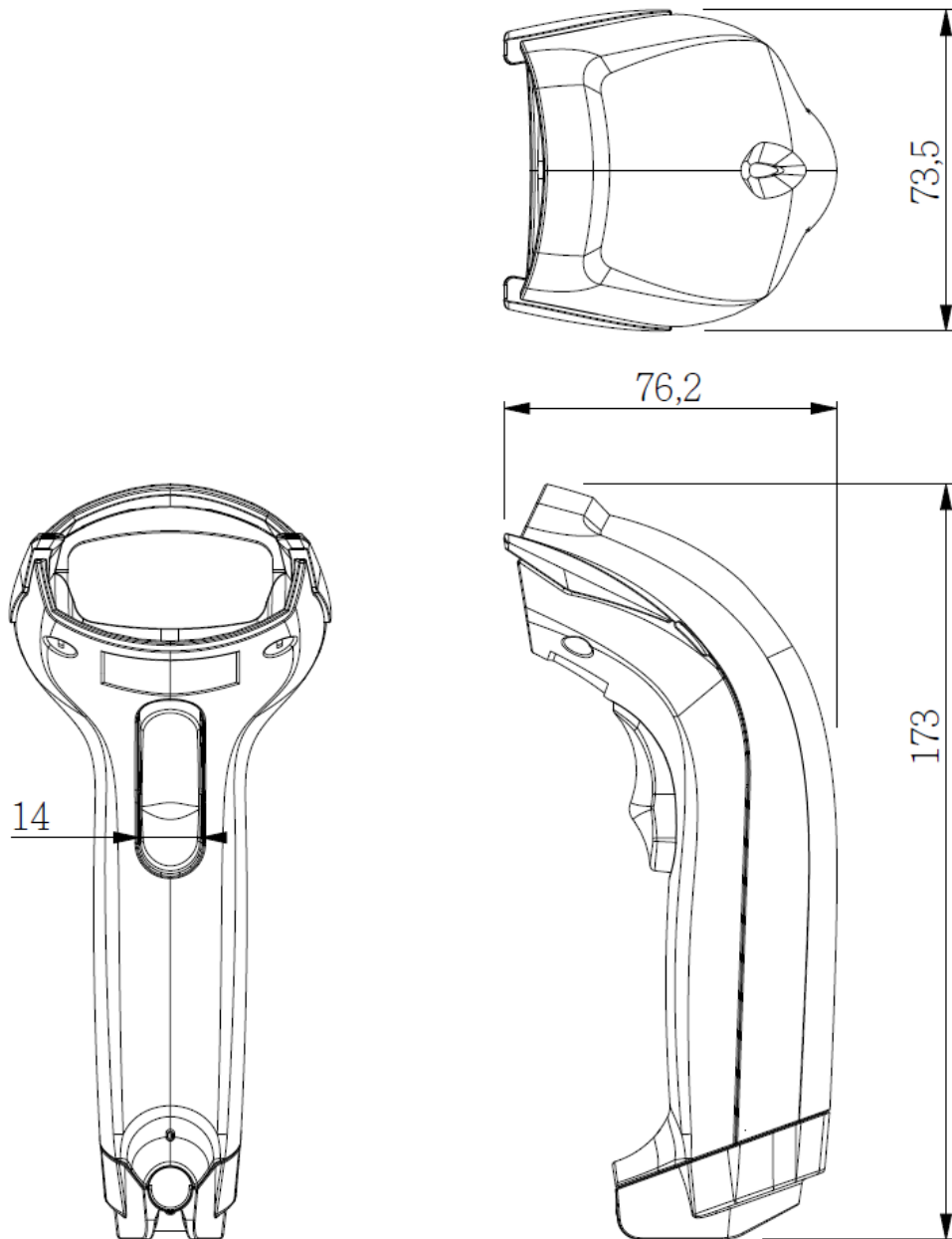
**(3) USB Interface**

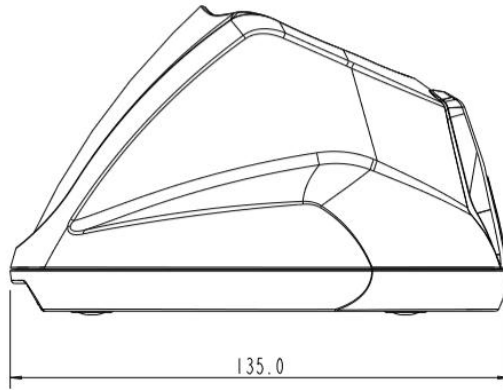
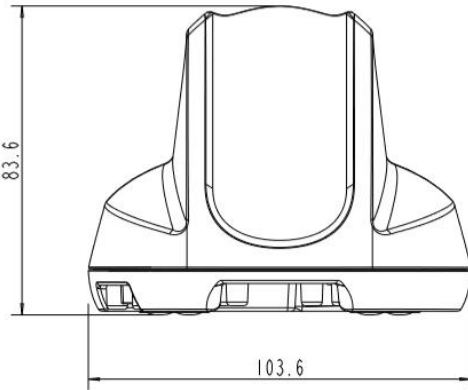
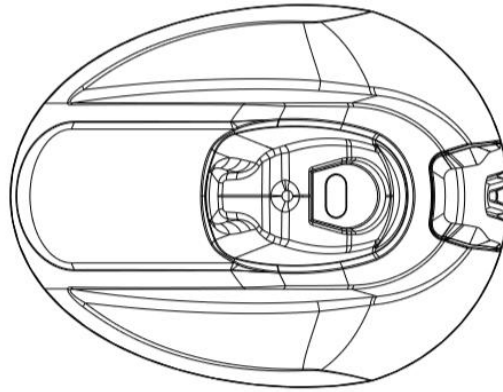
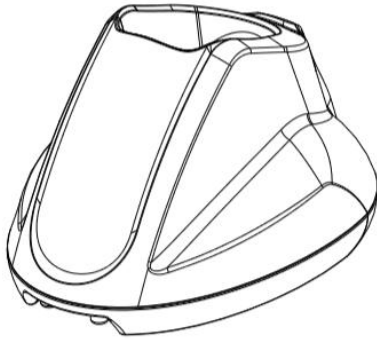
**USB A Type Male**

Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND



Unit: mm





### C. Electrical Characteristics

#### Scanner:

Power Battery	Li-ion 3.7V / 2600 mAh
Charge Time	Approx. 5 hours
Reads per Charge	50,000 times in continuous read
LED Indicator	Good read: Green Error / Alarm: Red Bluetooth Communication: blue

#### Power Consumption

Operation	200mA
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#### Cradle:

Input Voltage	5 VDC @ 2 A / Input AC 110-240V
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#### Power Consumption

Operation	70mA
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LED Indicator	Good read: Green Bluetooth Communication: blue
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## D. Performance

Light Source	Visible Red light 635±5nm LED
Sensor	Linear CCD Sensor
Processor Type	ARM Cortex-M3
Operating Freq.	8 MHz
Scan Speed	Smart detection, up to 500 scans per second
Reading Distance	Up to 550mm@20mil/0.5mm, PCS90%, Code39
Print Contrast Ratio(Minimum)	25%
Resolution	4mil/0.1mm@PCS90%, Code39
Indicator	Beep and LED (Good read Green)
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Forward & Backward(Pitch)	±10°~65°(±5°)
Left & Right(Skew)	± 60°(±5°)
Ambient Light	100,000 Lux Max.
Sealing	IP42 water and dust protection

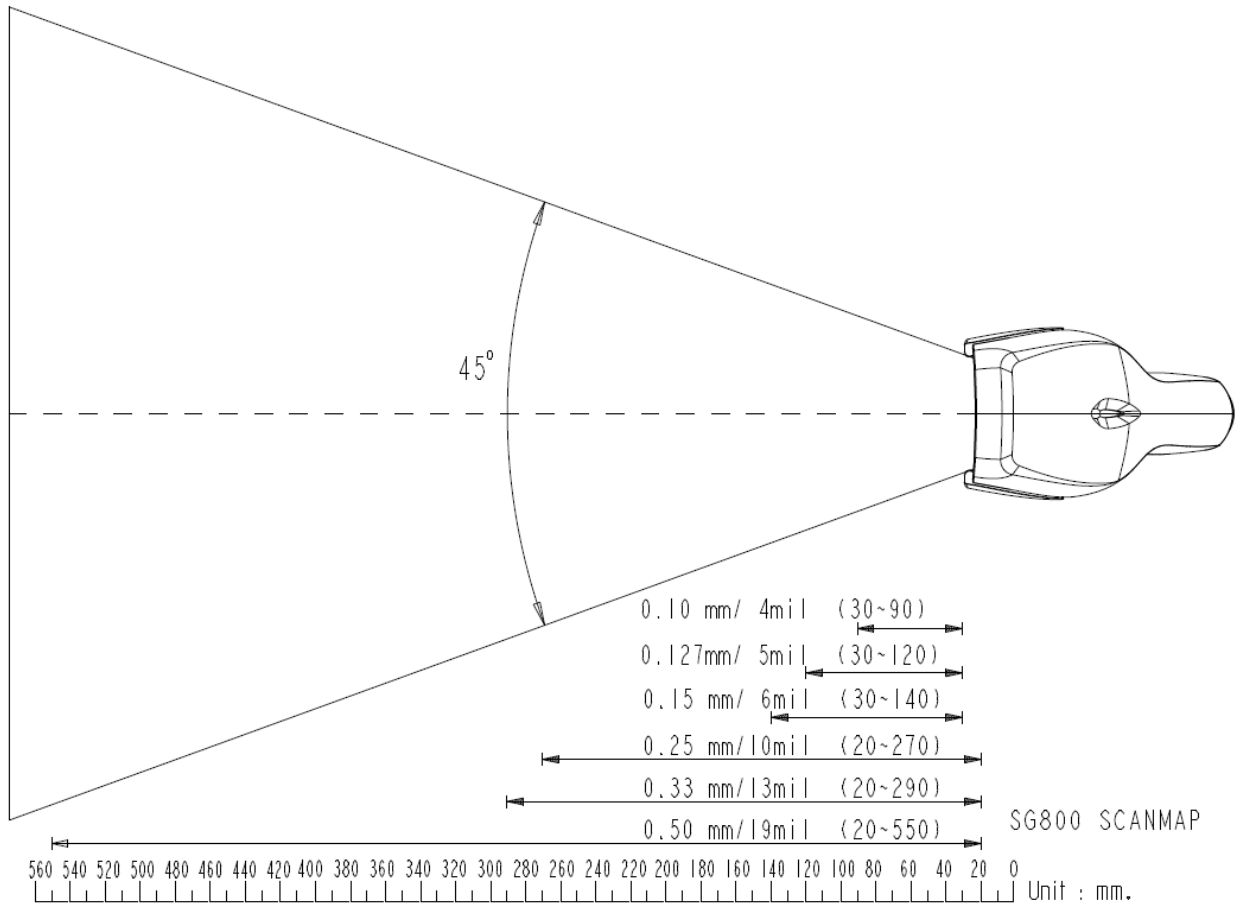
## E. Environmental

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative Humidity	20% to 95% (Non-condensing)

## F. Readable Symbolologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	
Code 39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
MSI/PLESSEY	V	
Code 93	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

### G. Scan Map



### H. Reliability

#### Life Time

Trigger Switch	1,000,000 times
MTBF(Calculated)	50,000 hours

#### Thermal Shock

High Temp.	50 °C (122 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	30 minutes for high temp. , 30 minutes for low temp.
Cycles	24 cycles

Cable Bending Test 25,000 times minimum (30 times/min @ 500g/90°)

Drop resistance 59.05 inches(150cm) drop on concrete surface