

# SPECIFICATION

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

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

Model No. : **SG600BT**  
**Wireless Linear Imager Bar Code Scanner**

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

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

Spec. Version & Revision Date:    V01    2018.02.23

Received/Approved by



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**Revision History**

Version	Date	Context
V00	2013.07.22	Initial release
V01	2018.02.23	Performance update

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## A. General Description



**SG600BT** is a general purpose wireless gun-type linear imager bar code scanner 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 it to user environment.

SG600BT 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. For hand-free operation application, customers can easily configure by themselves to facilitate it to be hand-free reading. With its built-in automatically turn off reading and switch on reading, as it sense a bar code moving in front of it, can extend its lifespan.

The scanner and cradle with Class1 Bluetooth V2.1 EDR technology with transmission range up to 100m/ 328.08 ft. in line of open sight, supports both SPP and HID profiles can easily pair up with other Bluetooth V2.1 compatible mobile equipments or systems.

In short, SG600BT is a high performance wireless 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.

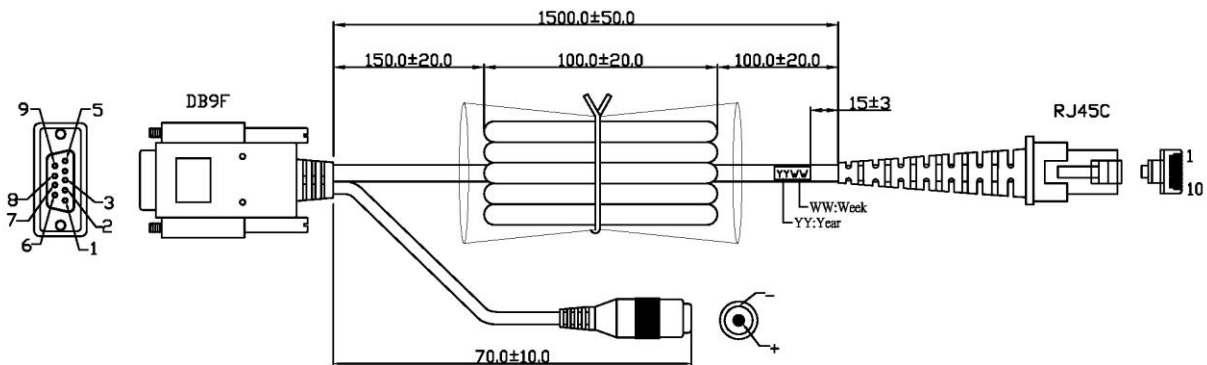
**B. Physical Characteristics**

<b>Weight</b>	
Scanner weight	Approx. 175g/ 6.17oz (include Battery)
Cradle weight	Approx. 150g/ 5.29oz
RS232 Cable weight	Approx. 100g/ 3.53oz
USB Cable weight	Approx. 70g/ 2.47oz
PS/2 Cable weight	Approx. 77g/ 2.71oz
AC adaptor weight	Approx 109g/ 3.84oz
<b>Dimension</b>	Scanner : 71.13 mm W x 62.61mm H x 169.27 mm L Cradle : 112.18 mm W x 84.64 mm H x 130.6 mm L
<b>Color Available</b>	Black(Cap & Grip ) / Dark Gray(Cap) and Beige (Grip)

**Cradle interface cable drawing**

(a) RS232 Interface :

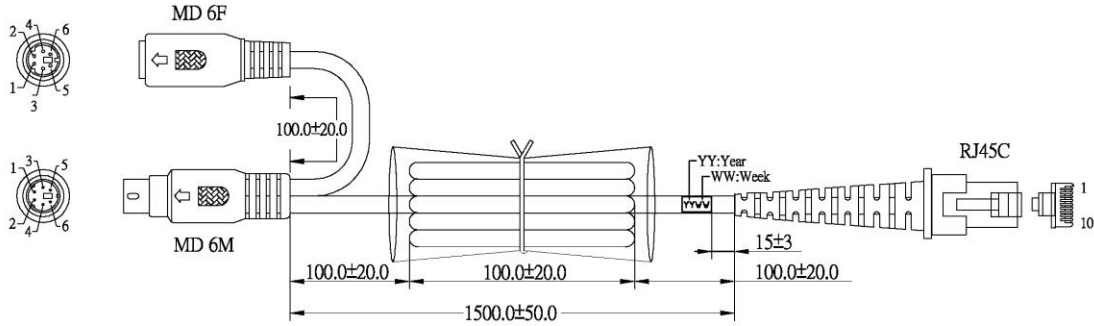
UNIT:mm



DB9F	RJ45C	DC JACK	FUNCTION	COLOR
5	3	Shell	GND	Brown
9	5	CORE	DC +5V	Red
2	7		TXD	Orange
3	9		RXD	Yellow
8	1		RTS	Green
7	10		CTS	Blue
Shell			Spiral	

**(b) PS/2 Keyboard interface**

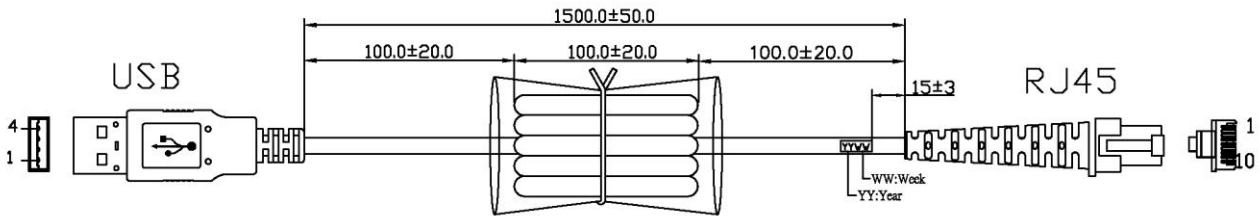
UNIT:mm



MD 6F	MD 6M	RJ45C	FUNCTION	COLOR
2	1		HOST DATA	Green
3	3	3	GND	Brown
4	5		HOST CLK	Blue
5	4	4	VCC	Red
6		5	KB CLK	Orange
8		1	KB DATA	Yellow
Spiral	Shell	Shell	SHIELDING	

**(c) USB interface**

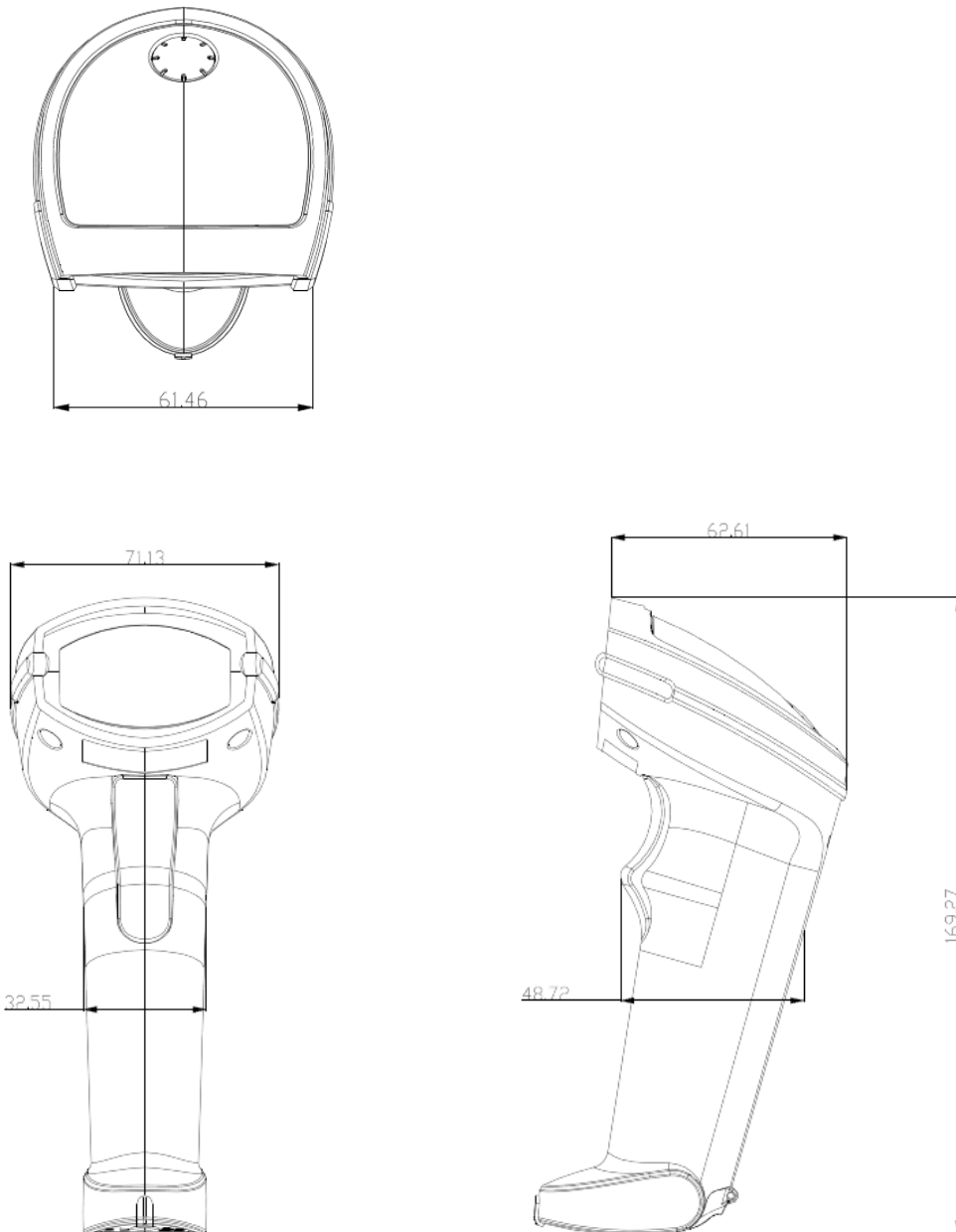
UNIT:mm



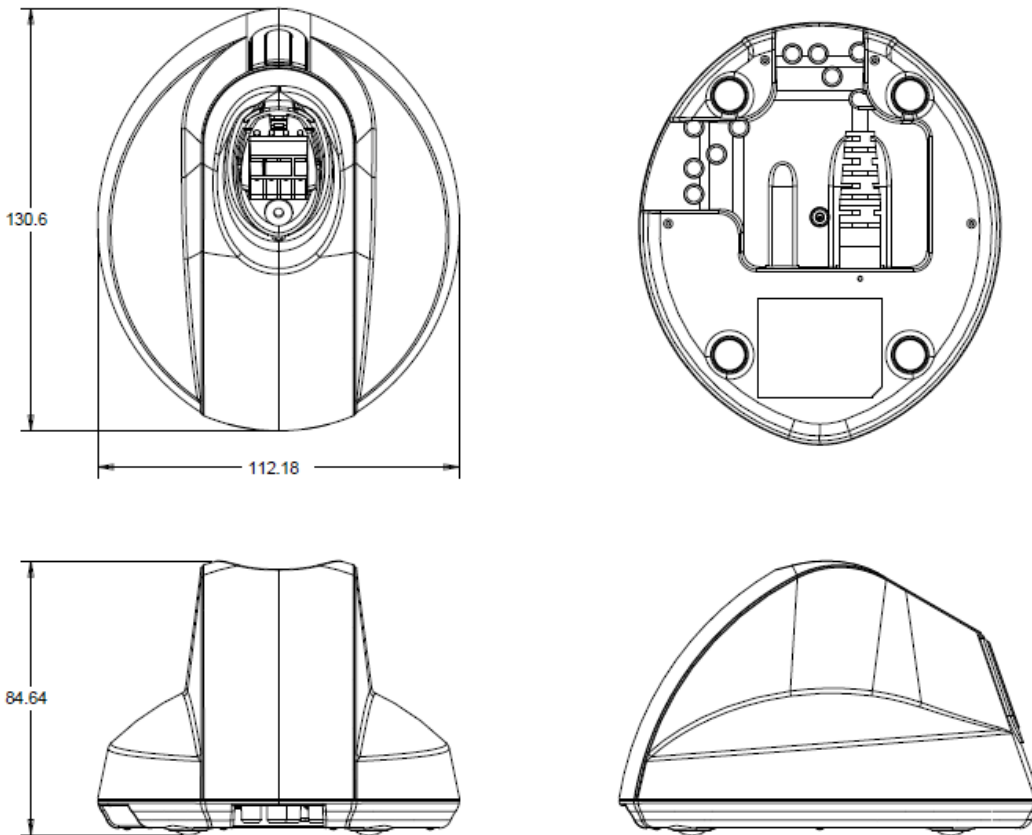
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	4	D-	Blue
3	2	D+	Green
4	3	GND	Brown
Shell	3	SHIELDING	

**Mechanical drawing**

(a) Scanner Dimension:



(b) Cradle Dimension:



**C. Performance**

Light Source	Visible Red Light 632 nm LED
Sensor	Linear CCD Sensor
Processor Type	32-bit
Operating Freq.	8 MHz
Scan Speed	Smart detection, up to maximum 500 scans per second
Reading Distance	Up to 500mm@20mil, PCS90%, Code39
Print Contrast Ratio	25%
Resolution	4mil/0.1mm@PCS90%, Code39
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.
Indicator	Beep and LED (Good read Green)



## D. Electrical Characteristics

Scanner Supply Voltage	Battery Li-Ion 3.7V / 2600mAh
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### Scanner Power Consumption

Power On	190mA
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Stand by	50mA
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Operation	200mA
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Sleep	6mA
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Recharge time	Approx. 5 hours
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Reads per charge	50,000 times in continuous read
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### Cradle Power Consumption

Power On	95mA
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Stand by	55mA
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Operation	70mA
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## E. Radio Characteristics

Bluetooth Module	Bluetooth V2.1 Standard, Supports both SPP and HID profiles
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Frequency Band	2.402GHz ~ 2.480GHz
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Modulation Method	GFSK for 1Mbps
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RF Output Power	Class 1 (under 20dBm)
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Radio Transmission Range	Up to 100m /328.08 ft. in line of open sight
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## F. Environmental

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
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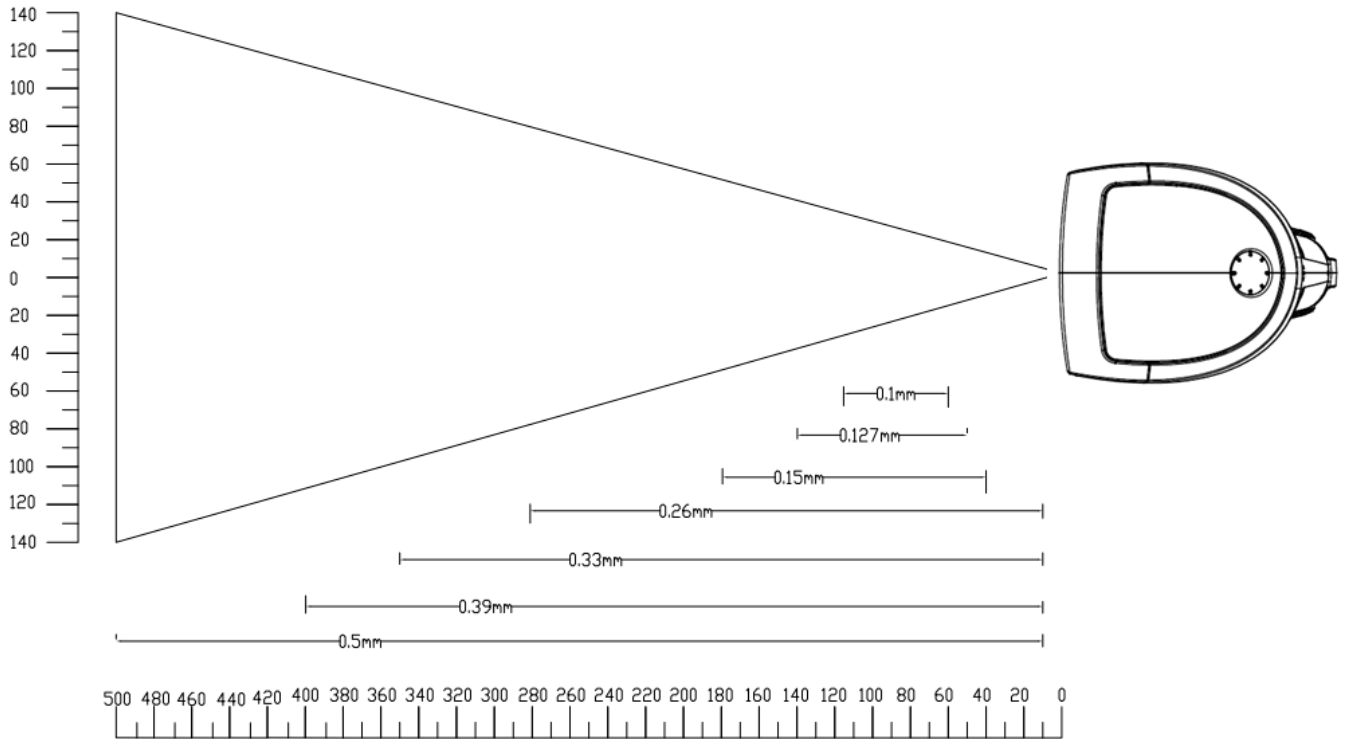
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
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Relative Humidity	20% to 95% (Non-condensing)
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## G. Readable Symbologies

	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	
Matrix 25	V	
MSI/PLESSEY	V	
Telepen	V	
Code 93	V	
Code 11	V	
China Postage	V	
Code 26	V	
LCD25	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

### H. Scan Map



### I. Reliability

<b>Life Time</b>	
Trigger Switch	1,000,000 times
MTBF(Calculated)	40,000 hours
<b>Thermal Shock</b>	
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