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

Revision History

Version	Date	Context
V00	2013.07.22	Initial release
V01	2018.02.23	Performance update

TABLE OF CONTENTS

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

Weight		
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
Dimension	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	
Color Available	Black(Cap & Grip) / Dark Gray(Cap) and Beige (Grip)	

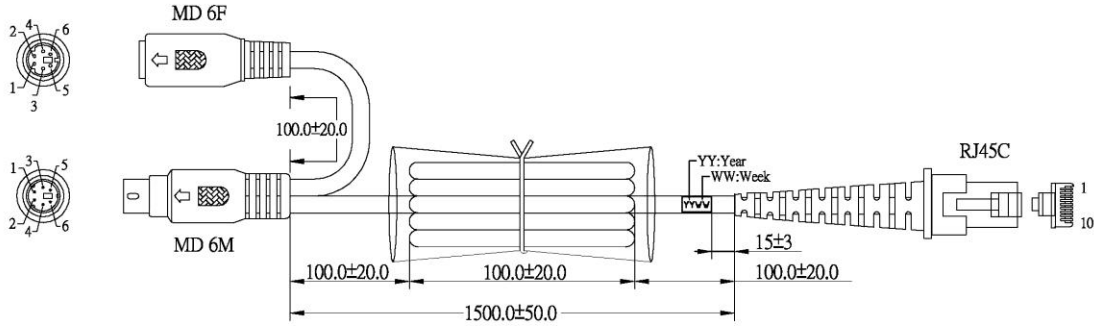## Cradle interface cable drawing

(a) RS232 Interface :
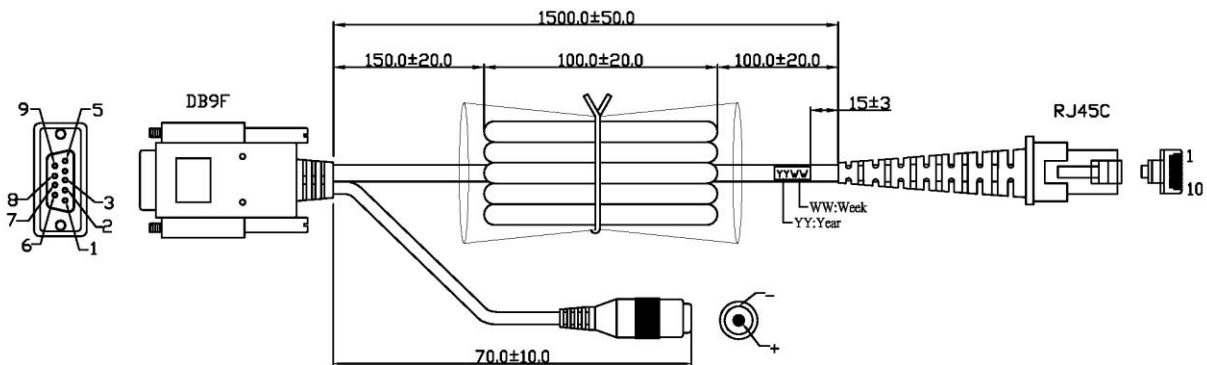
DB9F	RJ45C	DC JACK	FUNCTION	COLOR
5	3	Shell	GND	Brown
9	5	CORE	DC +5V	Red
2	7		TXD	Orange
3	9		RXD	Yellow
8	1		RTS	Green
7	10		CTS	Blue
Shell			Spiral	

(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	SHELDING	

(c) USB interface

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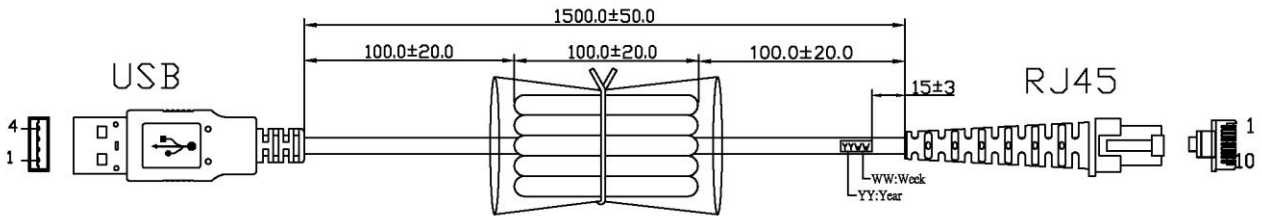
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	4	D-	Blue
3	2	D+	Green
4	3	GND	Brown
Shell	3	SHIELDING	

Mechanical drawing

   (a) Scanner Dimension:
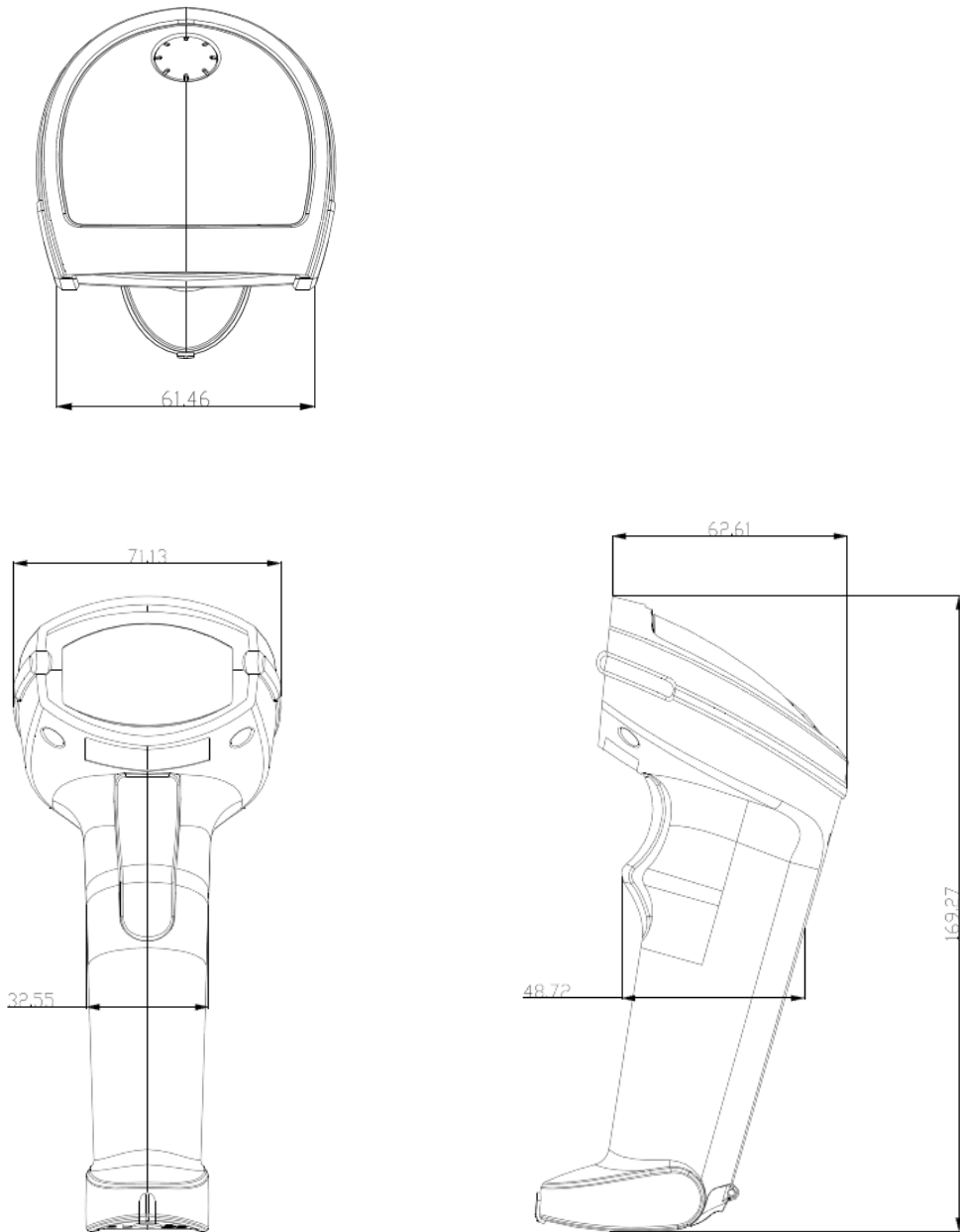
(b)   Cradle Dimension:
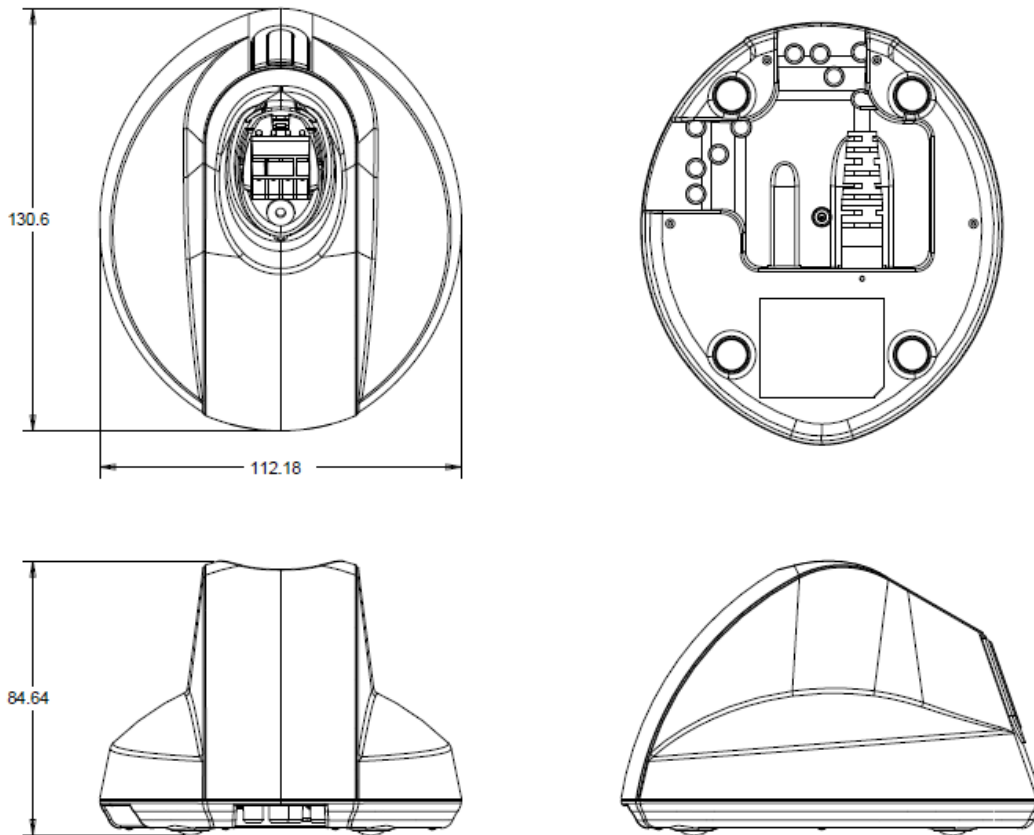
C. Performance

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	*Test Conditions : Code 39, 10mil/0.25mm, PCS 90%*
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
Scanner Power Consumption	
Power On	190mA
Stand by	50mA
Operation	200mA
Sleep	6mA
Recharge time	Approx. 5 hours
Reads per charge	50,000 times in continuous read
Cradle Power Consumption	
Power On	95mA
Stand by	55mA
Operation	70mA

E. Radio Characteristics

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

F. Environmental

Operating Temperature	0 oC to 50 oC (32 oF to 122 oF)
Storage Temperature	-20 ^{o}C to 60 ^{o}C (-4 ^{o}F to 140 ^{o}F)
Relative Humidity	20% to 95% (Non-condensing)

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
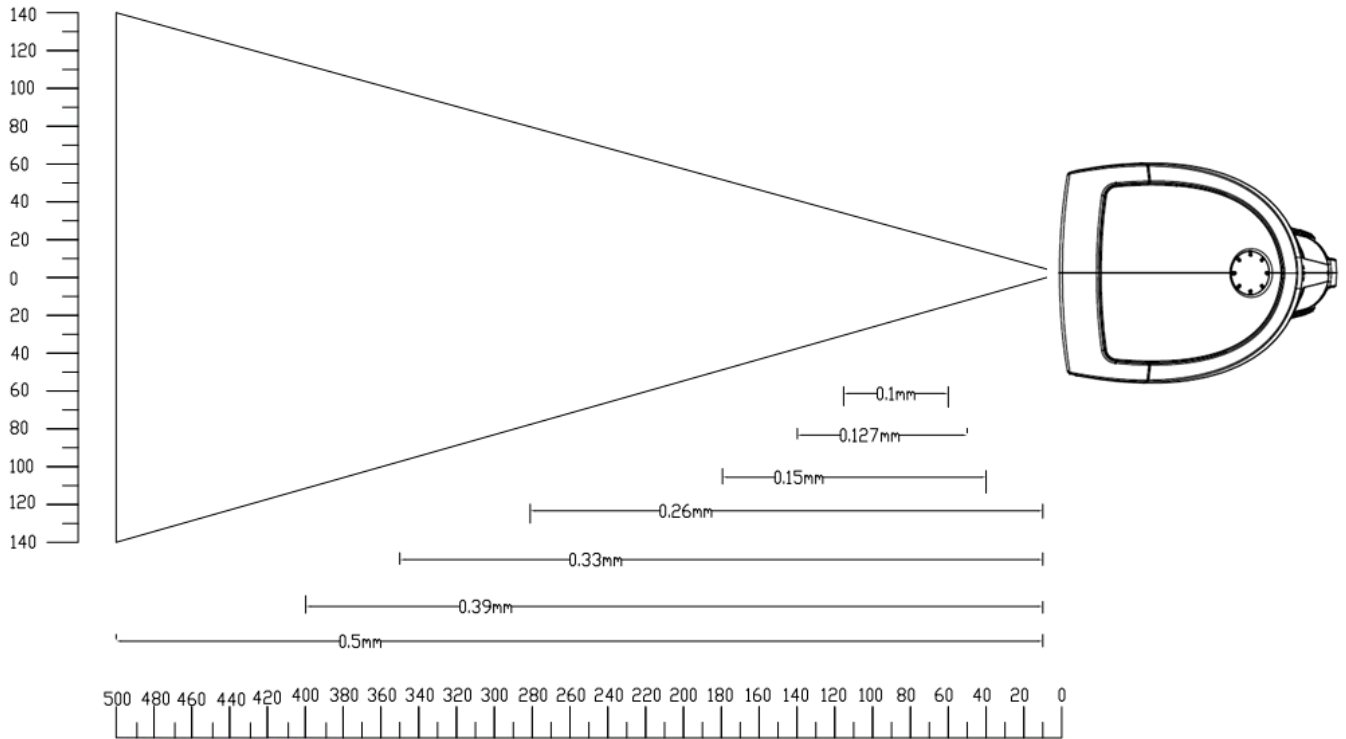
I. Reliability

Life Time	
Trigger Switch	1,000,000 times
MTBF(Calculated)	40,000 hours
Thermal Shock	
High Temp.	50 ^{o}C (122 ^{o}F)
Low Temp.	-20 ^{o}C (-4 ^{o}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 ^{o})
Drop Resistance	59.05 inches (150cm) drop on Concrete Surface