

# SPECIFICATION

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

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

Model No. : **LG610BT Wireless Laser Bar Code Scanner**

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

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

Spec. Version & Revision Date: V00 2013.07.25

Received/Approved by



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## Revision History

Version	Date	Context
V00	2013.07.25	Initial release

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## A. General Description



**LG610BT** is a general purpose wireless gun-type laser bar code scanner which is designed specifically for retail, logistic and warehousing management market. Introducing new series models of housing, we include friendly functions with the replaceable interface cable that makes it more easily to be operated by customers.

LG610BT has most modern design which supports reading range up to 300 mm. There are multiple interfaces available for selection, include RS232, Keyboard wedge and USB interfaces. For hand-free operation application, customers can easily configure by themselves to facilitate it to be hand-free reading.

The scanner and cradle are equipped 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.

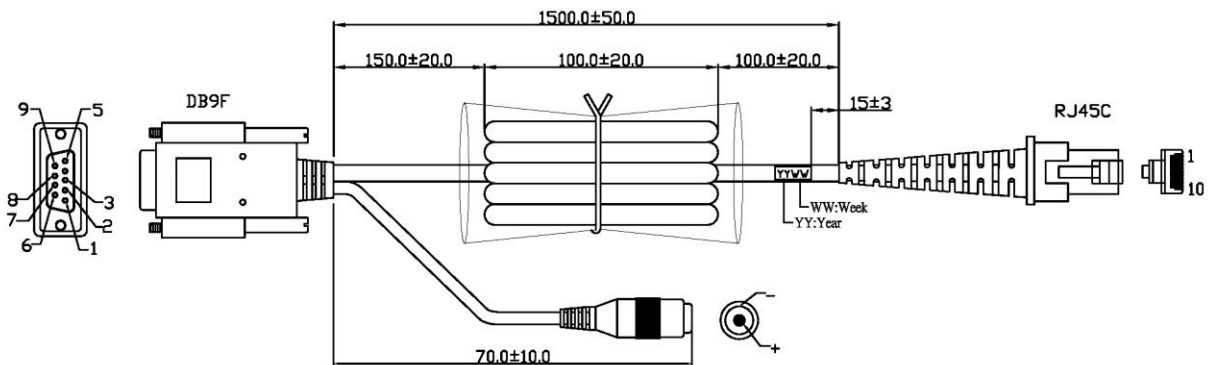
In short, LG610BT is a high performance wireless laser bar code scanner, which provides the customer with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retail and logistic environment.

## B. Physical Characteristics

Weight	
Scanner weight	Approx. 185.4g/ 6.54oz (incl. Battery)
Cradle weight	Approx. 147.4g/ 5.2oz
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

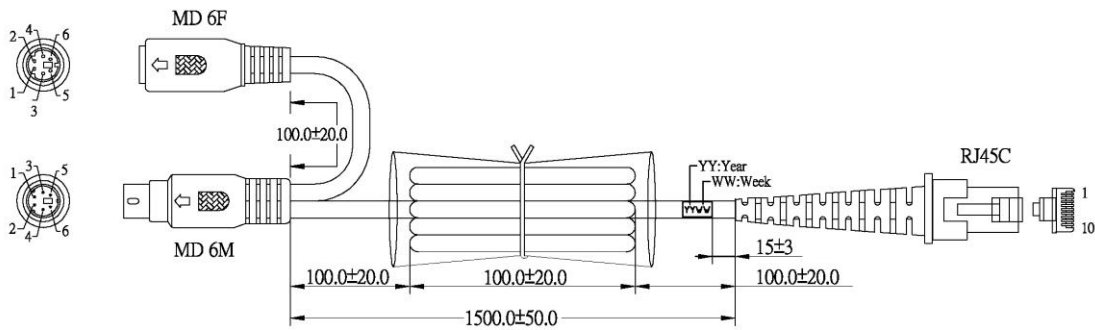
UNIT:mm



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**

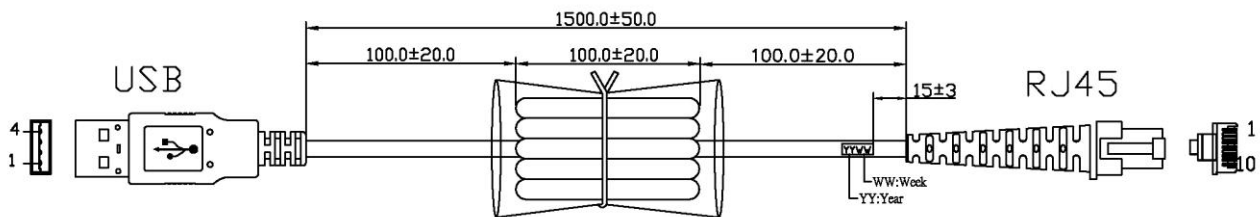
UNIT:mm



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**

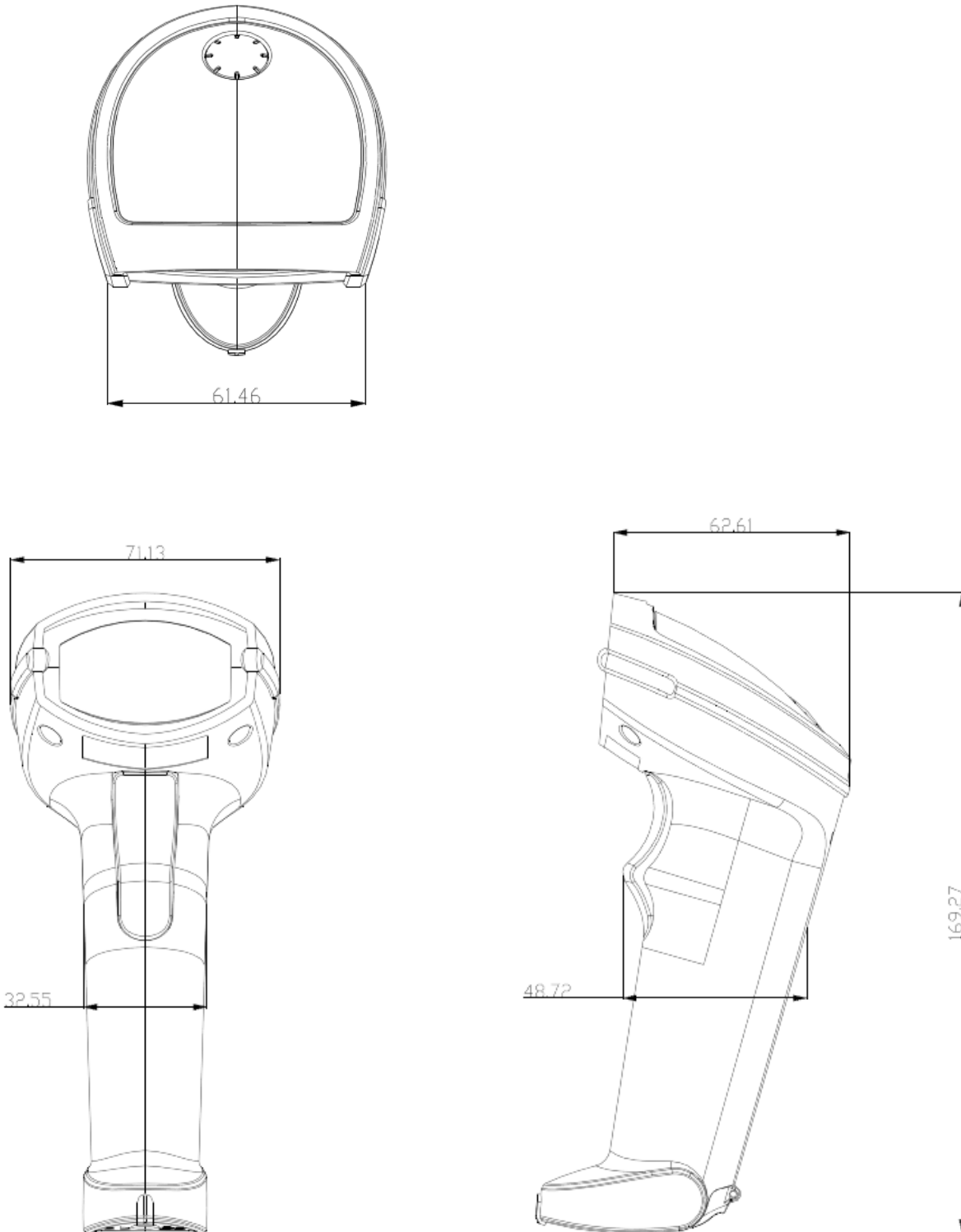
UNIT:mm



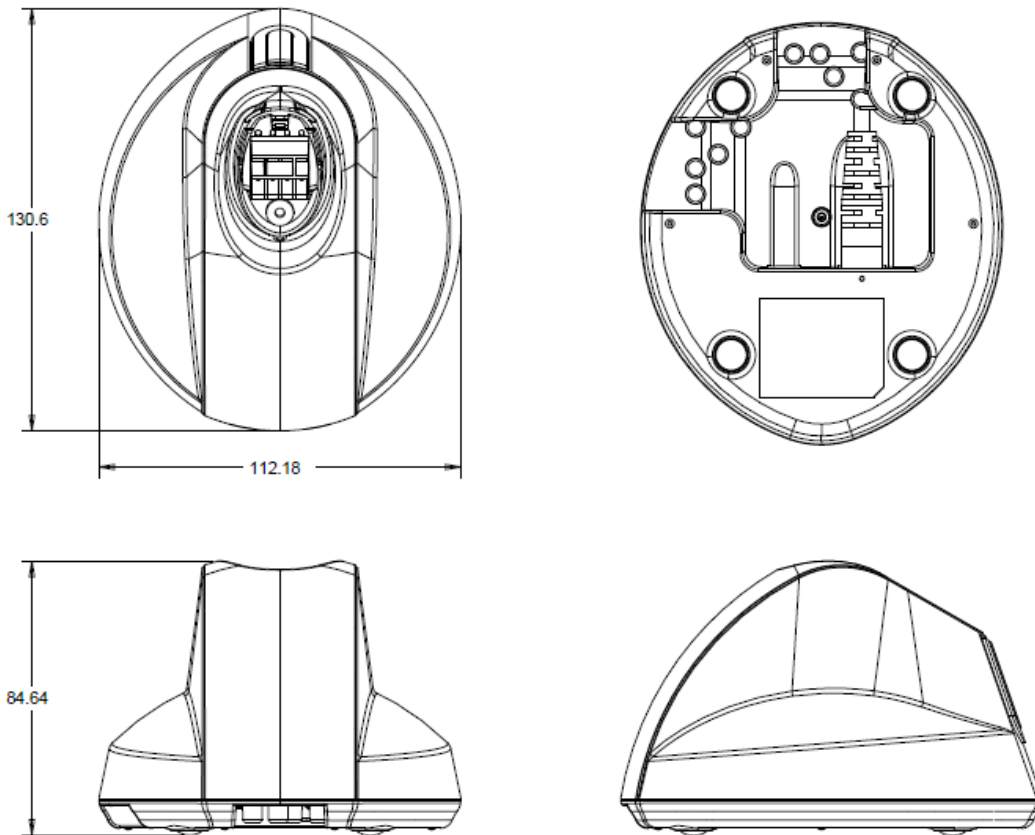
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	4	D-	Blue
3	2	D+	Green
4	3	GND	Brown
Shell	3	SHIELDING	

**Mechanical drawing**

(a) Scanner Dimension:



(b) Cradle Dimension:



### C. 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	
Power On	200mA
Stand by	100mA
Operation	170mA
Sleep	6mA



**Cradle:**

Input Voltage	5 VDC @ 2 A / Input AC 110-240V
Power Consumption	
Power On	95mA
Stand by	55mA
Operation	70mA
LED Indicator	Good read: green Bluetooth Communication: blue

**D. Performance**

Light Source	Visible Laser Diode 650± 10 nm
Sensor	Photo Sensor Diode
Decoder Processor Type	32 bits microcontroller
Scan Speed	50 scans per second ± 5%
Reading Distance	Up to 300mm@20mil/0.5mm, PCS90%
Width of Field	45° ± 3°
Print Contrast Ratio(Minimum)	30%
Resolution	5mil/0.127mm@PCS90%
Reading Angle	<i>Test Conditions: Code 39, 10mil/ 0.25mm, PCS 90%</i>
Forward & Backward(Pitch)	45°/ 60° (±5°)
Left & Right (Skew)	± 10° (±5°)
Ambient Light	
Direct sun light	5,000 Lux Max.
Indicator	Beep and LED (Good read Green)

**E. Radio Characteristics**

Bluetooth Module	Bluetooth V2.1 Standard, Support 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

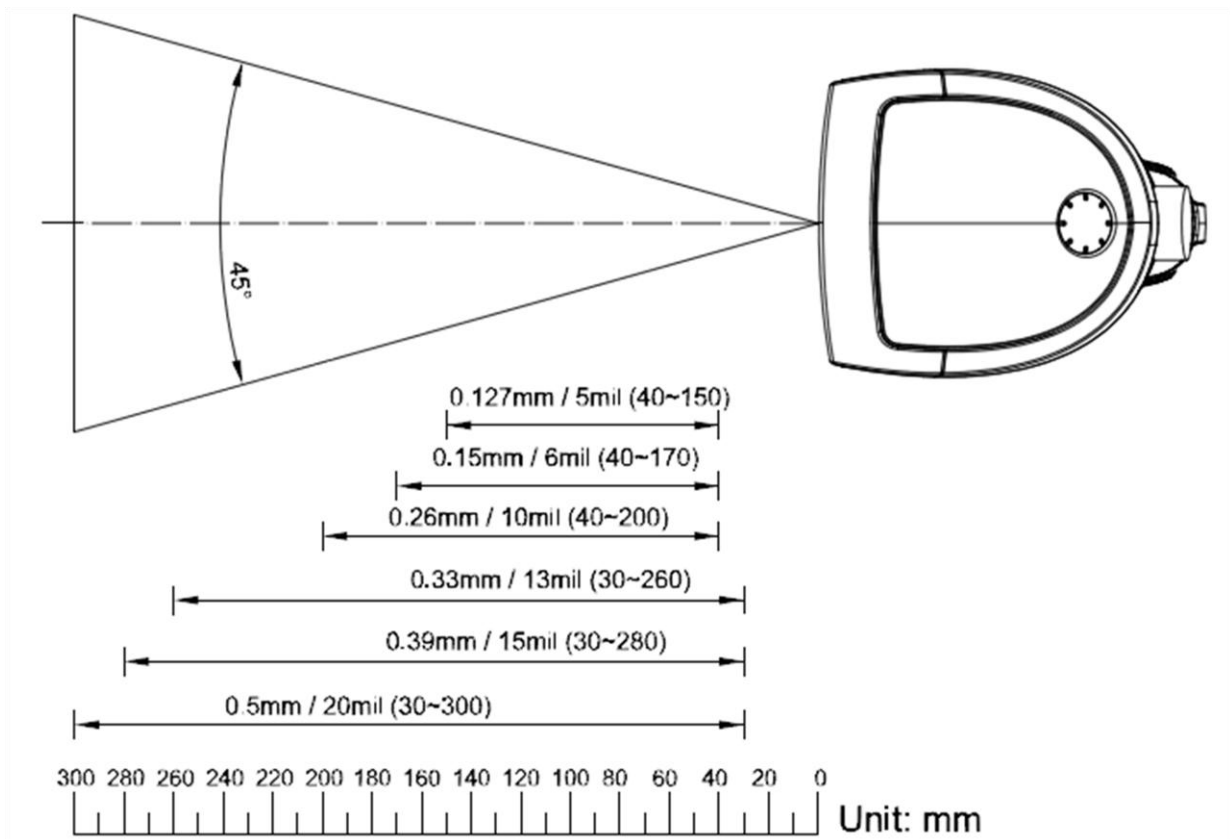
**F. Environmental**

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °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	
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)	35,000 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
<b>Cable Bending Test</b>	25,000 times minimum (30 times/ min @ 500g/ 90°)
<b>Drop</b>	47.24 inches (120cm) Drop to concrete surface