

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : **IG620BT** Bluetooth Area Imager Barcode Scanner _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V00 2018.01.23 _____

Received/Approved by

CHAMPTEK[®]
阿丹電子企業股份有限公司

Web : <http://www.champtek.com>

E-mail : sales@champtek.com

Champtek Incorporated

5/F, No. 2, Alley 2, Shih-Wei Lane, Chung Cheng Rd., Hsin
Tien District, New Taipei City, Taiwan, R.O.C.

Tel : 886-2-22192385

Fax : 886-2-22192387

Revision History

Version	Date	Context
V00	2018.01.23	Release

TABLE OF CONTENTS

A. General Description.....	4
B. Physical Characteristics.....	5
C. Performance	9
D. Electrical Characteristics	10
E. Environmental	10
F. Reading Range	10
G. Readable Symbologies	11
H. Reliability.....	12

A. General Description

IG620BT is a brand new gun-type wireless area 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.

IG620BT supports 1D and 2D barcode scanning with up to 300mm reading depth for the majority of 1D, 2D bar codes and GS1 DataBar™ codes. Support out of range or batch transmission mode, memory capacity stores up to 30,000 inputs of EAN13 barcodes.

The scanner and cradle with 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 V2.1 compatible mobile equipments or systems.

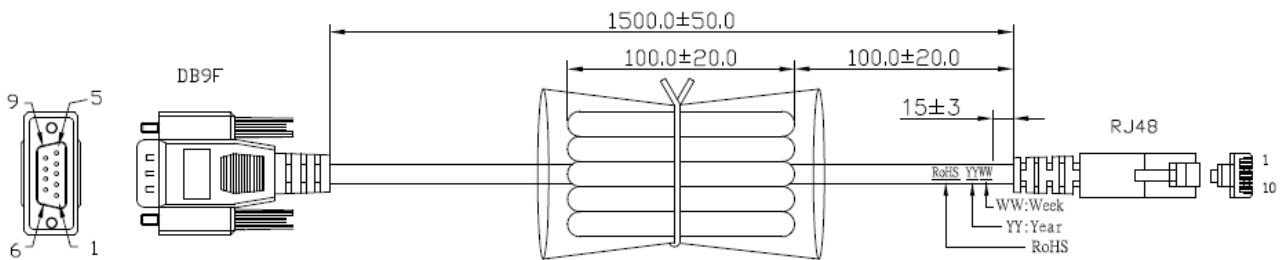
In short, IG620BT is a high performance wireless barcode scanner which provides customers with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retail and logistic environment.



B. Physical Characteristics

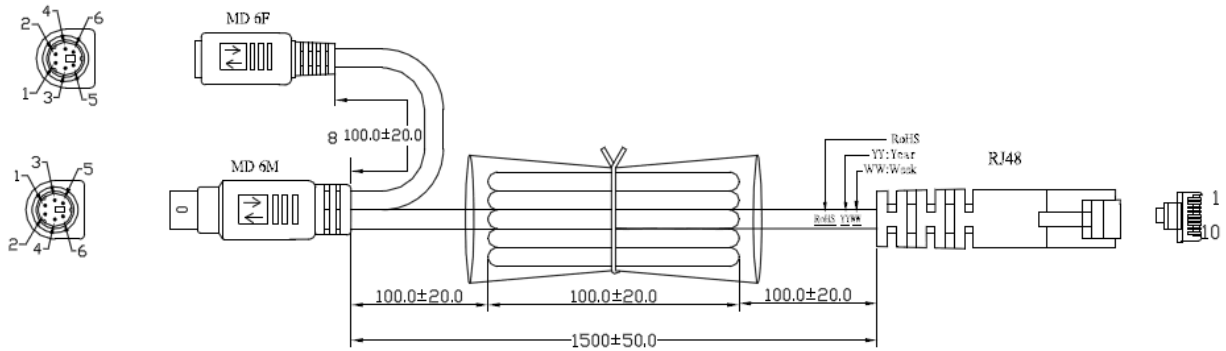
Scanner weight	Approx. 182g/ 6.42oz (with Battery)
Cradle weight	Approx. 147.4g/ 5.2oz
RS232 Cable weight	Approx. 100g/ 3.53oz
USB Cable weight	Approx. 70g/ 2.47oz
PS/2 Cable weight	Approx. 77g/ 2.71oz
AC adaptor weight	Approx 109g/ 3.84oz
Dimension	Scanner : 71.13 mm W x 62.61mm H x 169.27 mm L Cradle : 112.18 mm W x 84.64 mm H x 130.6 mm L
Color Available	Black(Cap & Grip) / Deep grey (Cap) and Beige (Grip)

**Cradle interface cable drawing
(a) RS232 Interface**



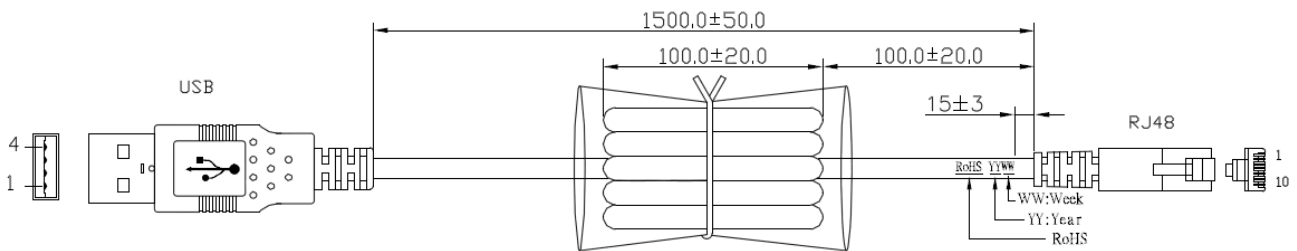
DB9F	RJ48	FUNCTION	COLOR
5	3	GND	Brown
9	5	DC +5V	Red
2	7	TXD	Orange
3	9	RXD	Yellow
8	1	RTS	Green
7	10	CTS	Blue
Shell		Spiral	

(b) PS/2 Keyboard interface



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	

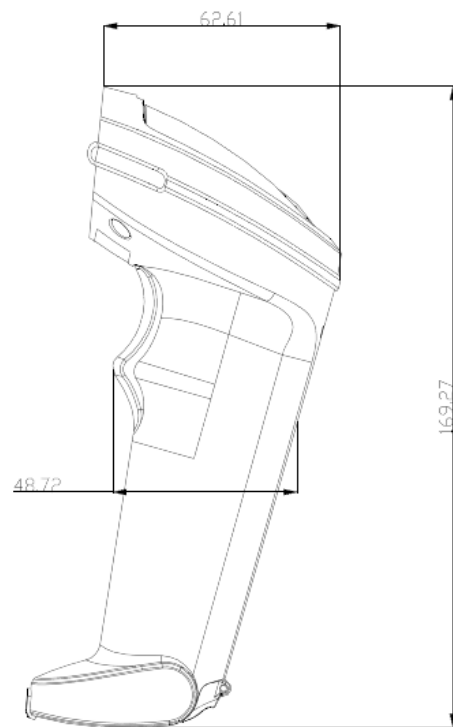
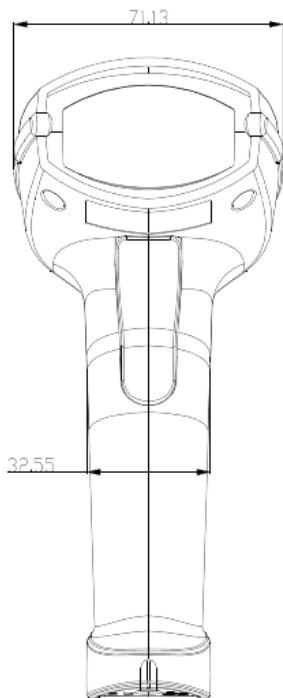
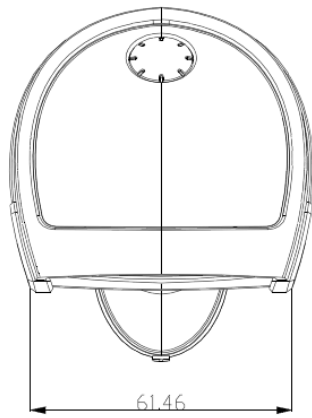
(c) USB interface



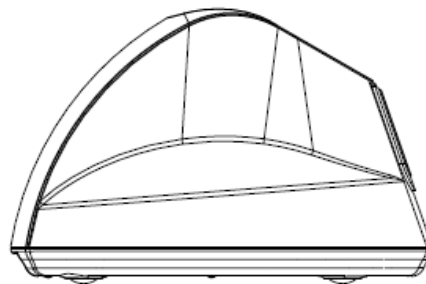
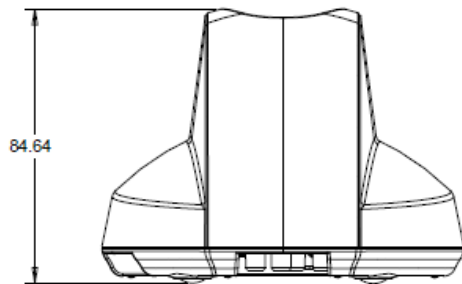
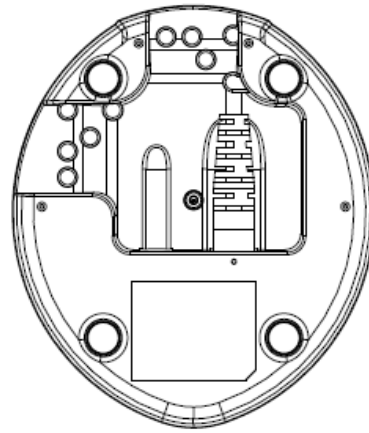
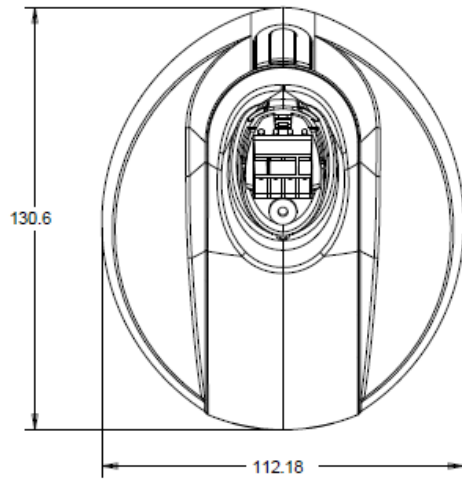
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	6	D-	Green
3	8	D+	Blue
4	3	GND	Brown
Shell	3	SHIELDING	

Mechanical drawing

(a) Scanner Dimension:

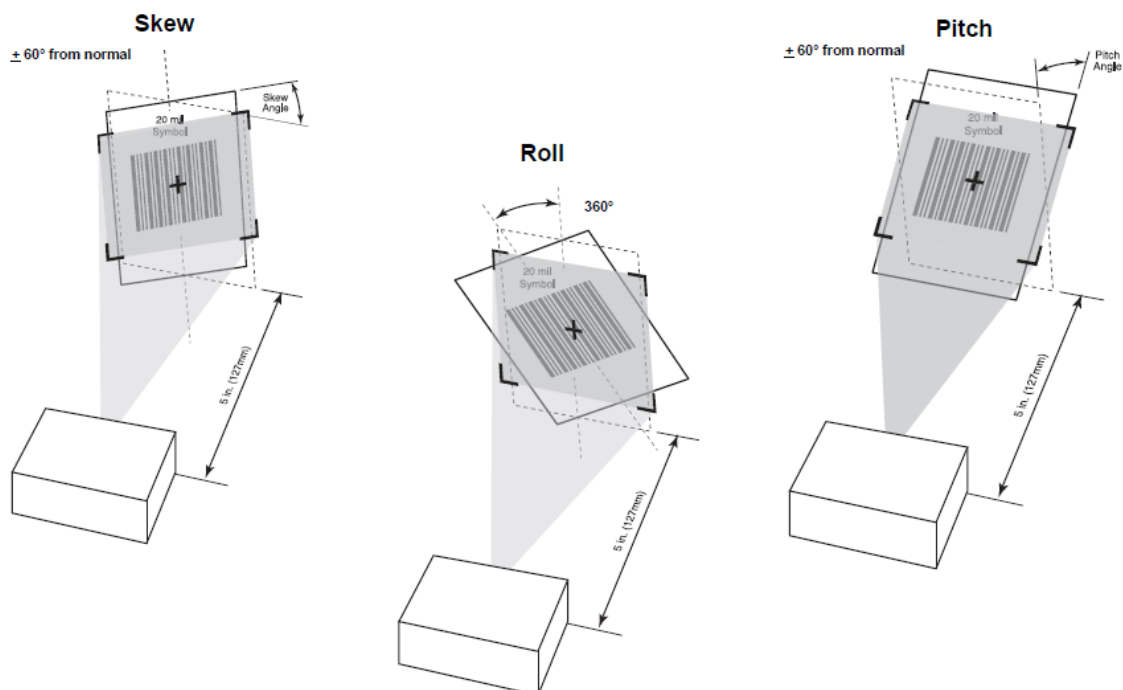


(b) Cradle Dimension:



C. Performance

Light source	Visible red light $625 \pm 5\text{nm}$ LED
Scan Rate	60 images per second
Resolution	1D: 4mil/0.1mm 2D: 10mil/0.26mm
Depth of Field	Up to 300mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	PCS45%@5mil/0.127mm
View of Field	40° Horizontal, 25° Vertical
Indicators	Beeper and LED (Green = good read)
Pitch	$\pm 60^\circ$ (from front to back)
Skew	$\pm 60^\circ$ (from plane parallel to symbol(side- to-side))
Roll	$\pm 180^\circ$
Interface	RS-232, USB (HID KBW or Virtual comport)
Indicators	Green = good read
Batch/out of range reading	Support batch transmission mode, memory capacity stores up to 30,000 inputs of EAN13 barcodes.



D. Electrical Characteristics

Scanner:

Power Battery	Li-ion 3.7V / 2600 mAh
Charge Time	Approx. 5 hours
Reads per Charge	20,000 times in continuous read
LED Indicator	Good read: Green Error / Alarm: Red Bluetooth Communication: blue

Power Consumption

Operation	445mA
-----------	-------

Cradle:

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

Power Consumption

Operation	70mA
-----------	------

LED Indicator	Good read: Green Bluetooth Communication: blue
---------------	---

E. Environmental

Operating Temp	0°C to 50°C (32°F to 122°F) Storage
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Relative Humidity	20% to 95% (Non-condensing)
Ambient light	100,000 Lux Max. (Sunlight)

F. Reading Range

Barcode	Depth of field
4mil Code39	40~80 mm
5mil Code39	40~110 mm
6mil Code39	40~120 mm
10mil Code39	40~180 mm
13mil Code39	30~250 mm
20mil Code39	30~300 mm
20mil QR Code	40~180 mm
10mil PDF417	35~120 mm
20mil PDF417	50~150 mm
20mil Data Matrix	50~240 mm

G. Readable Symbologies

1D Symbologies	Readable	Default Enable
UPC-A	V	V
UPC-E	V	V
EAN-8/JAN-8	V	V
EAN-13/JAN-13	V	V
Code 39	V	V
Code 128	V	V
Interleaved 25	V	
Industrial 25	V	
Matrix 25	V	
Codabar/NW7	V	
Code 93	V	
China Post	V	
MSI/Plessey	V	
Telepen	V	
GS1 Databar Omni-directional	V	
GS1 Databar Limited	V	
GS1 Databar Expanded	V	

2D Symbologies	Readable	Default Enable
Aztec	V	
Aztec Mesas		
Data Matrix	V	V
Maxi Code		
PDF 417	V	V
Micro PDF 417		
QR Code	V	V
Micro QR Code		
GM Code		
Han Xin Code		

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 47.24 inches(120cm) drop on concrete surface