

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : **IG820** Gun-type Area Image Barcode Scanner

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V00 2018.08.22

Received/Approved by



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

Http://www.champtek.com

TEL : 886-2-22192385

E-mail : sales@champtek.com

FAX : 886-2-22192387

Revision History

Version	Date	Context
V00	2018.08.22	Release

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A. General Description



IG820 is a brand new general purpose gun-type Area Image Barcode Scanner which is designed especially for retail, logistic and warehousing management market. We include friendly functions with replaceable multiple interface cable options that makes it more easily to be operated by the customers to accommodate itself to user environment.

IG820 has most modern design with rugged casing and supports IP42 sealing protection, with its auto-shuttle-emulation alike smart detection, for the majority of 1D /2D bar codes and GS1 DataBar™ codes. An optional stand can be ordered to facilitate hand-free reading application.

With its auto-sense mode, it will automatically turns off and senses a object in front of it to switch on reading, can extend its lifespan.

In short, IG820 provides 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.

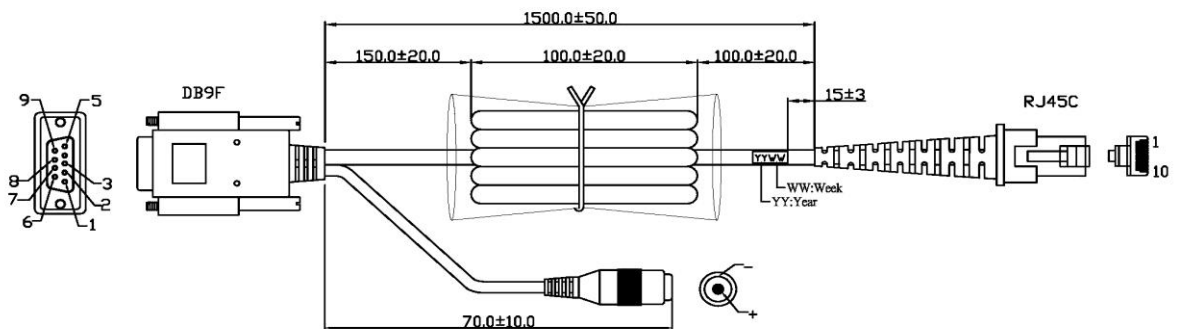
B. Physical Characteristics

Weight	
Body weight	Approx. 110g / 3,88 oz
Material	ABS / Rubber
Cable Length	5FT. (150cm)
Connector	RJ 45C 10Pins
Dimension	73.5 mm W x 62.8mm H x 177.5 mm L
Color Available	Black / Gray

a. Cable drawing (Unit:mm)

(1) RS232

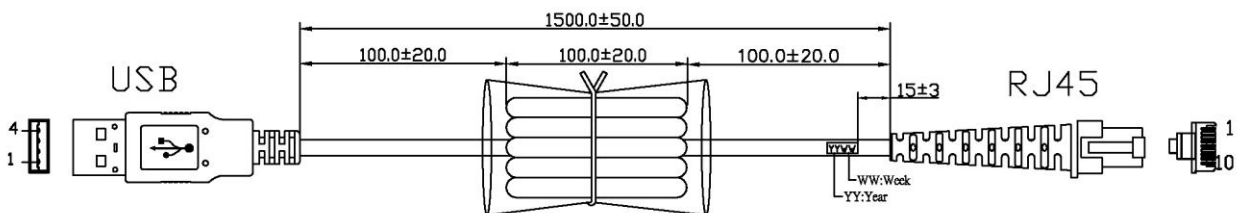
UNIT:mm



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	

(2) USB

UNIT:mm



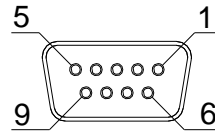
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	4	D-	Blue
3	2	D+	Green
4	3	GND	Brown
Shell	3	SHIELDING	

b. Pin Assignment

(1) RS-232 Interface

DB 9 Female

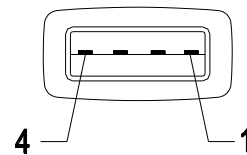
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



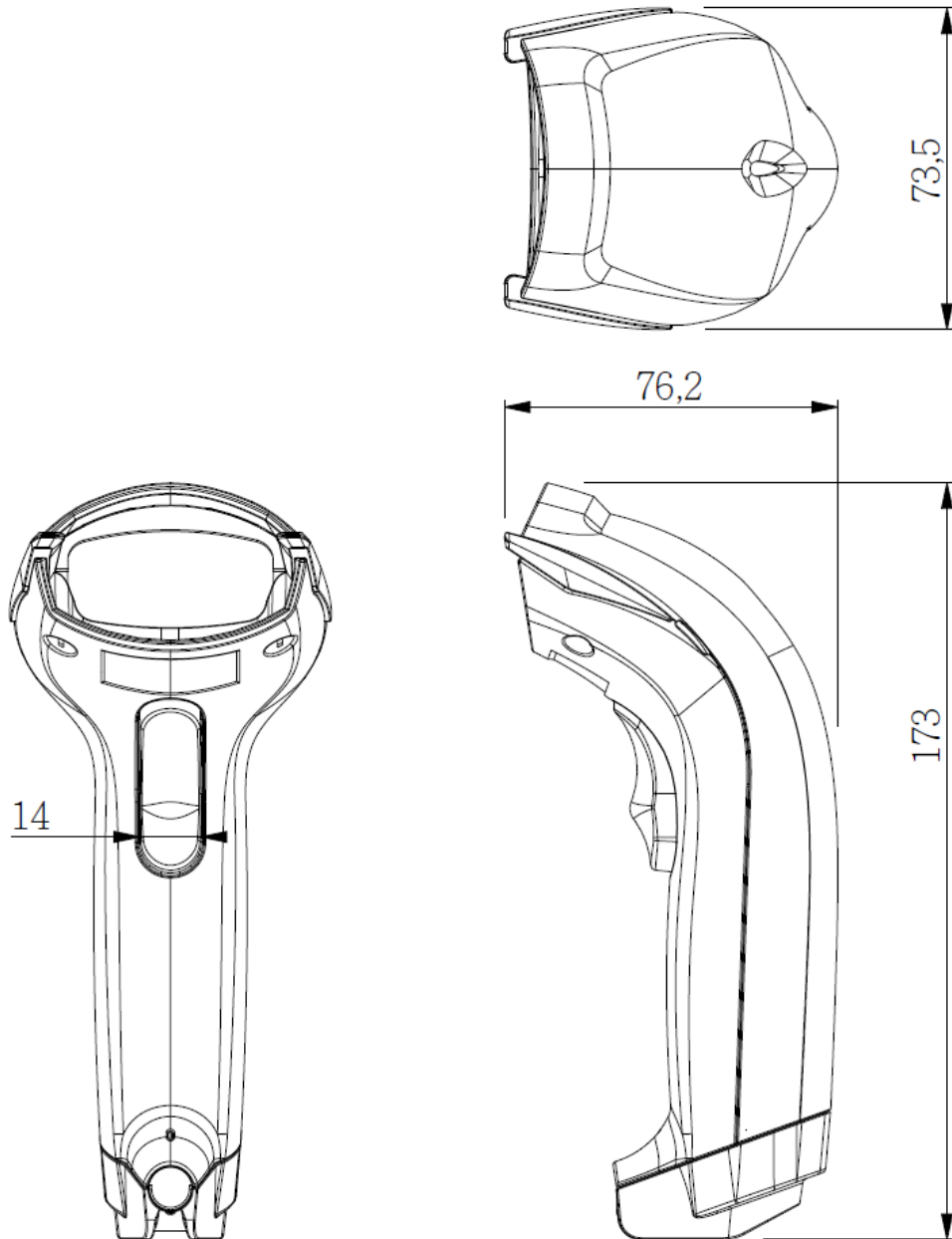
(2) USB Interface

USB A Type Male

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



Unit: mm



C. Electrical Characteristics

Interface	RS232	USB
Supply Voltage		
Output Voltage (Typ.)	±9V	+5V
Current Draw		
Stand by (Typ.)	180 mA	180 mA
Operation (Typ.)	360mA	360 mA

D. Performance

Light Source	White light LED
Sensor	752 (H) x 480 (V) pixels
Field of view	Horizontal – 40°, Vertical – 25°
Scan Rate	60 fps (at full resolution)
Reading Distance	250mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	PCS45%@5mil/0.127mm
Resolution	4mil/0.1mm@PCS90% Code39, 10mil/.26mm@PCS90% QRCode
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm,PCS90%</i>
Pitch Angle	5°~60° (±5°)
Skew Tolerance	5°~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

1D Symbolologies	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	V	
Omni-directional		
GS1 Databar Limited	V	
GS1 Databar Expanded	V	

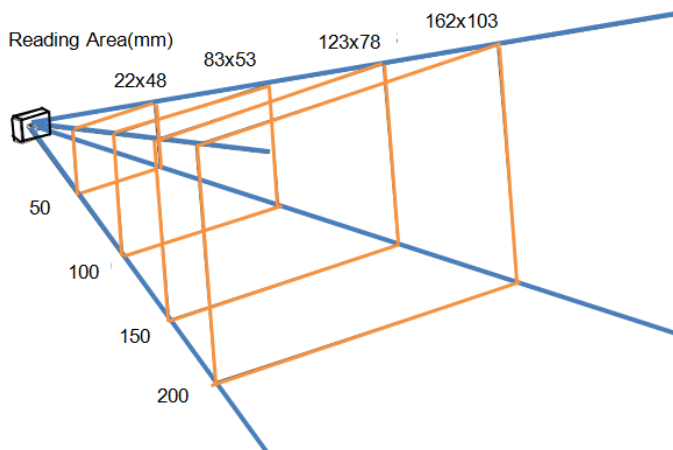
2D Symbolologies	Readable	Default Enable
Aztec	V	
Aztec Mesas	Optional	
Data Matrix	V	V
Maxi Code	Optional	
PDF 417	V	V
Micro PDF 417	Optional	
QR Code	V	V
Micro QR Code	V	
GM Code	Optional	
Han Xin Code	Optional	

G. Scan Map

Barcode	Depth of field
4mil Code39	20 ~ 90 mm
5mil Code39	20 ~100 mm
6mil Code39	20 ~110 mm
10mil Code39	20~ 150 mm
13mil Code39	20 ~180 mm
20mil Code39	20 ~ 250 mm
20mil QR Code	30 ~ 150 mm
10mil PDF417	30 ~ 110 mm
20mil PDF417	30 ~ 150 mm
20mil Data Matrix	30 ~ 200 mm

Note:

1. The test is under ambient light 700 ~ 800 Lux.
2. Reading area



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 °)
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Drop resistance	70.86 inches(180cm) drop on concrete surface
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