

# SPECIFICATION

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

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

Model No. : IG380 Imager Bar Code Scanner

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

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

Spec. Version & Revision Date: V02 2019.05.03

Received/Approved by



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Revision History

Version	Date	Context
V00	2018.08.22	Release
V01	2018.09.25	Update Resolution
V02	2019.05.03	Update Performance

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## A. General Description

The IG380 area imager barcode scanner brings unmatched performance along with the latest advanced technology to the point-of-sale checkout operations, and it is a reliable bar code reader suitable for a wide range of environments. The IG380's features and its outstanding price-performance ratio make it the best solution for retail and POS applications.

The IG380 provides a 'black' or 'warm gray' color option, emphasizing the curving lines of the new enclosure and supports keyboard wedge, RS232 and USB interface. The powerful built-in decoder reads and discriminates all major 1D, 2D bar codes and GS1 DataBar™ symbologies, including damaged or poorly printed codes, reducing processing time and labor costs, while increasing accuracy.

Its barcode programming menu provides extensive configuration options. A stand option can be ordered to facilitate hand-free reading option and by configured to its automatic wake-up reading mode can extend its lifespan.

The IG380 provides customers with the most cost-effective solution in the market and is the best choice for any retail environment.



## B. Physical Characteristics

### Weight

Body weight	Approx. 90 g
Cable weight	Approx. 60 g

### Material

ABS

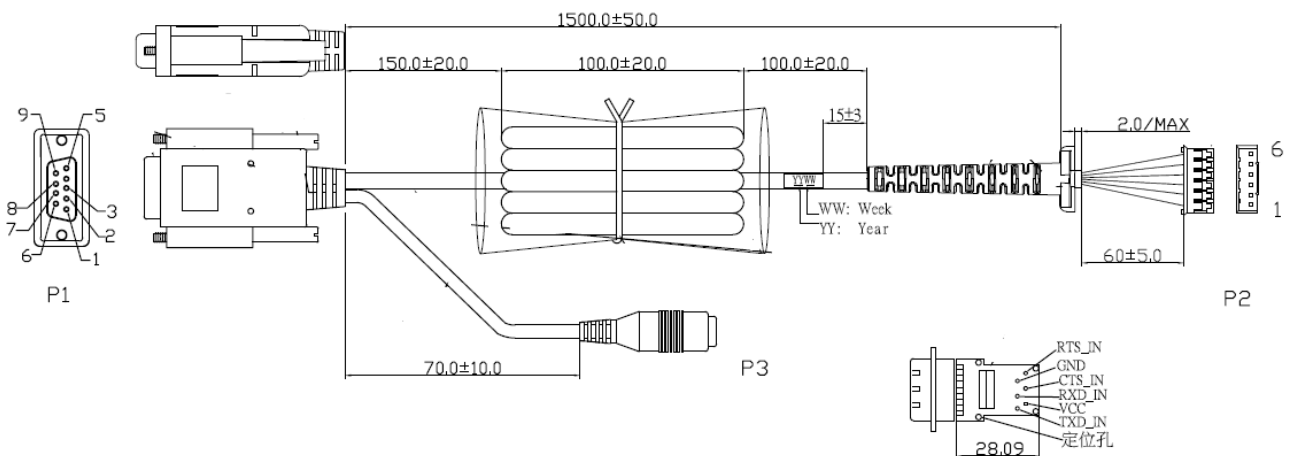
### Dimension

65.01 mm W x 168.01 mm D x 54.92 mm H

## Cable drawing

### RS232 Interface :

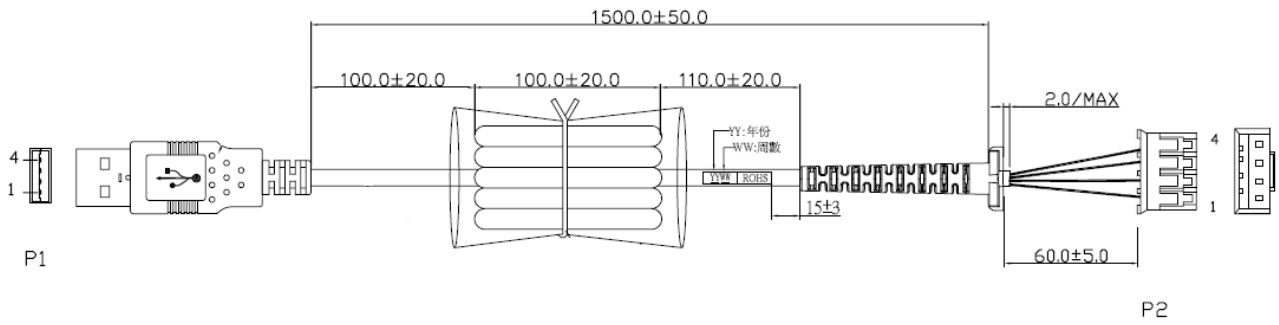
Unit :mm



LIST				Function
P3	P1	Color	P2	
Shielding	5	Brown	6	GND
CORE	9	Red	1	POWER
	2	Orange	2	TXD
	3	Yellow	3	RXD
	8	Green	5	RTS
	7	Blue	4	CTS
	Shielding	GND	6	Shielding

**USB Interface :**

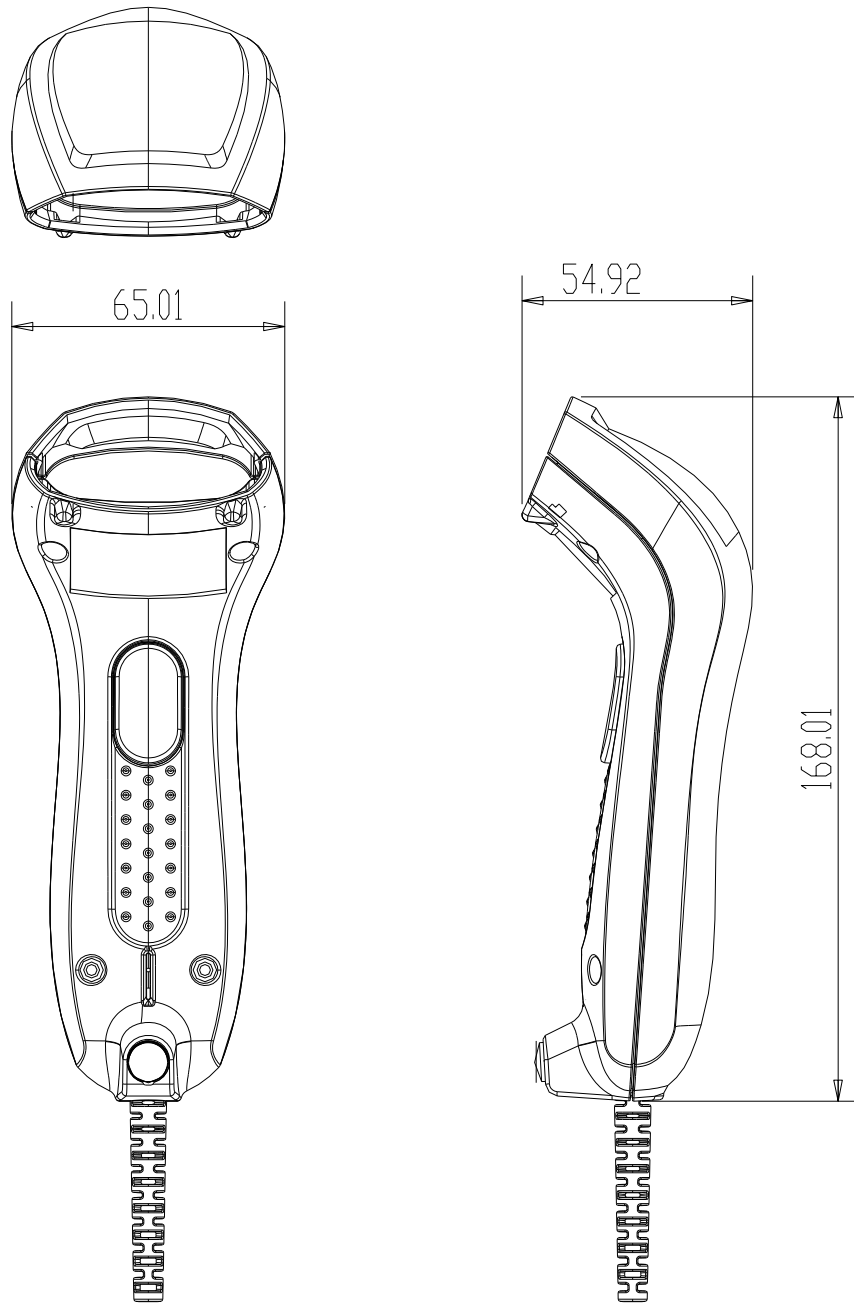
Unit : mm

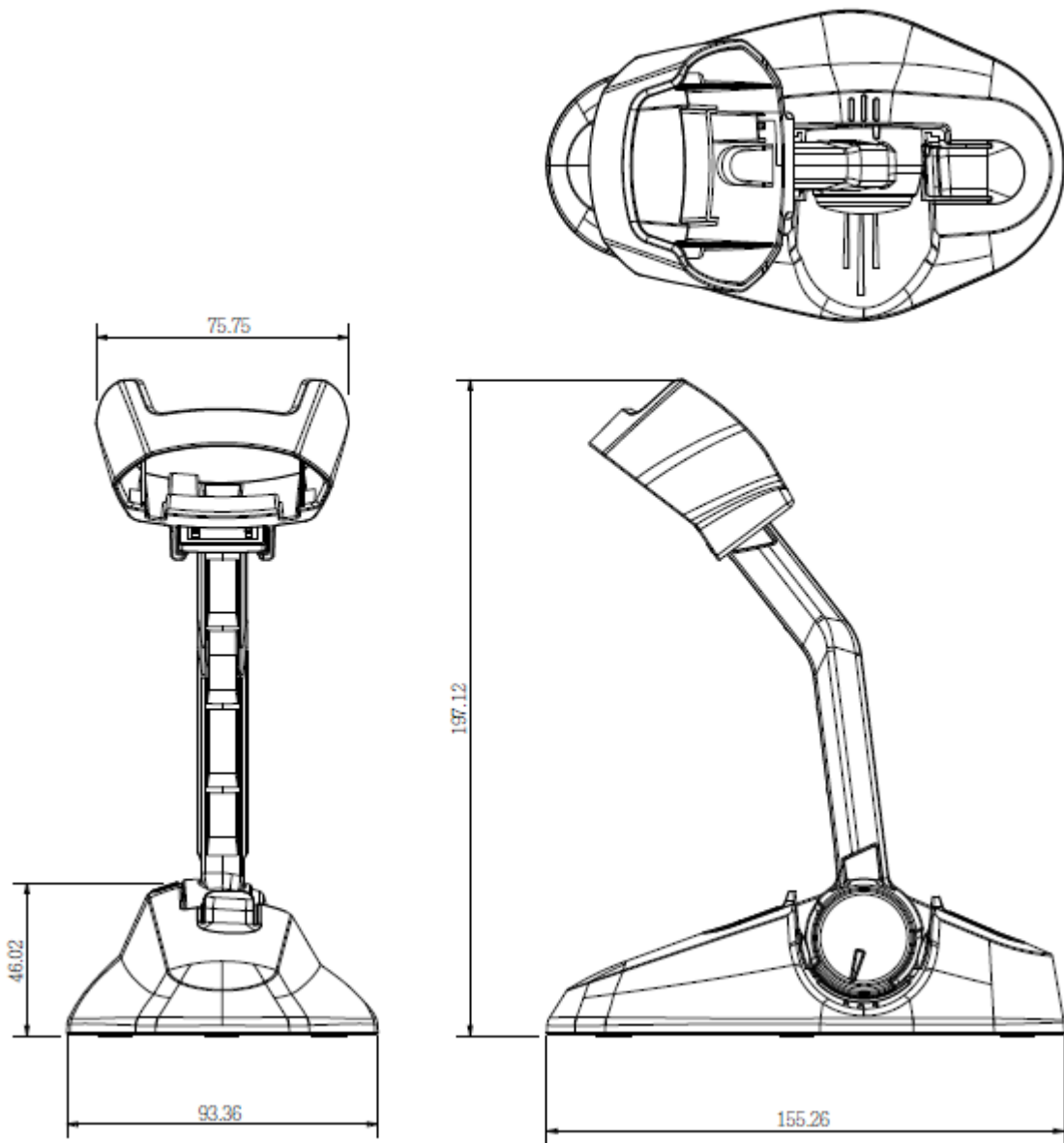


LIST			Function
P1	Color	P2	
1	Red	1	VCC
2	Blue	3	D-
3	Green	2	D+
4	Brown	4	GND
Shielding	GND	4	Shielding

**Mechanical drawing**

Unit : mm







## C. Electrical Characteristics

Interface	RS232	USB
Supply Voltage		
Output Voltage (Typ.)	±9V	+5V±5%
Output low Voltage (Max.)	-	0.7V
Current Draw		
Stand by (Typ.)	40 mA	35 mA
Operation (Typ.)	380 mA	335 mA

## D. Performance

Light Source	White light LED
Sensor	1280 (H) x 800 (V) pixels
Field of view	Horizontal – 55°, Vertical – 35°
Scan Rate	60 fps
Reading Distance	250mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	<a href="#">PCS30%@5mil/0.127mm</a>
Resolution	3mil/0.076mm@PCS90% Code39, 8mil/0.2mm@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.

## 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 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
Codabar/NW7	V	V
Interleaved 25	V	V
Industrial 25	V	
Matrix 25	V	
Code 93	V	
China Post	V	
Code 11	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	
Data Matrix	V	V
PDF 417	V	V
Micro PDF 417	Optional	
QR Code	V	V
Micro QR Code	V	
GM Code	Optional	
Han Xin Code	Optional	

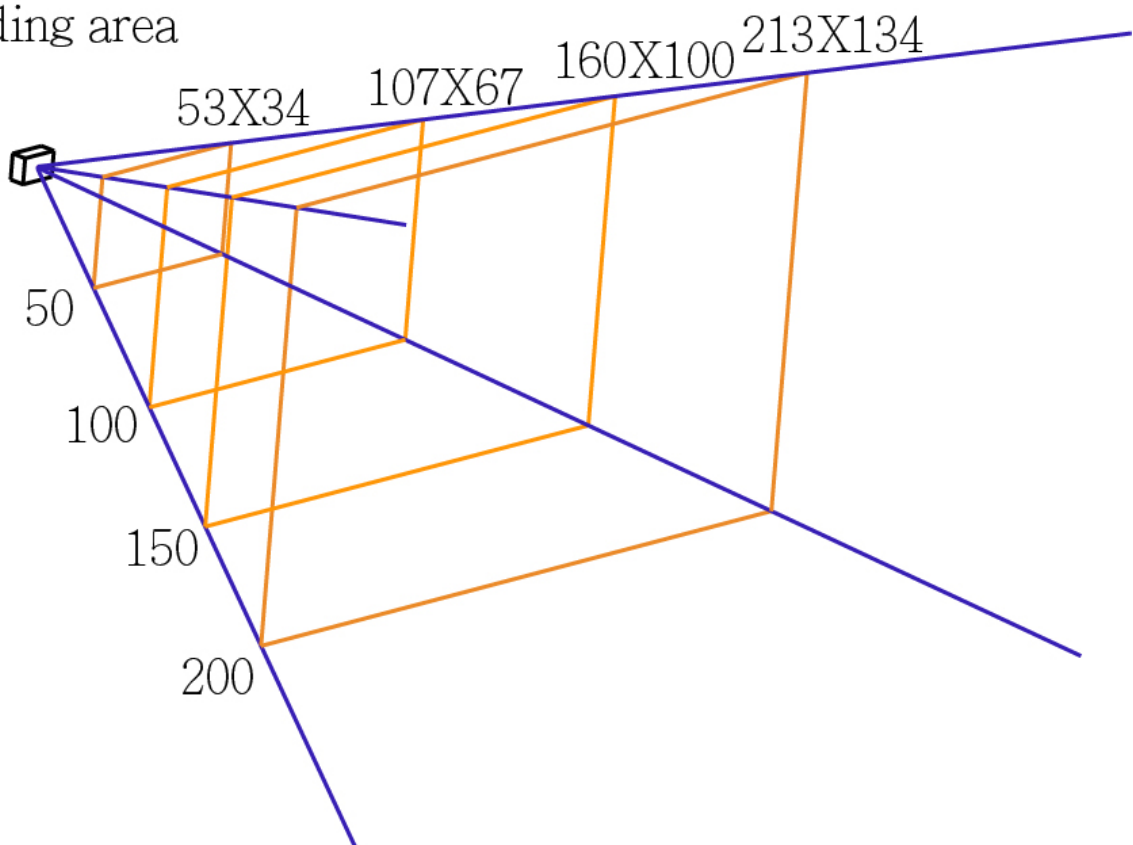
### G. Depth of field

Barcode	Depth of field
3mil Code39	40 ~ 90 mm
4mil Code39	35 ~ 95 mm
5mil Code39	30 ~ 110 mm
6mil Code39	30 ~ 140 mm
10mil Code39	30 ~ 160 mm
13mil Code39	30 ~ 180 mm
20mil Code39	30 ~ 250 mm
20mil QR Code	30 ~ 160 mm
20mil PDF417	30 ~ 110 mm
20mil Data Matrix	30 ~ 160 mm

Note:

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

Reading area

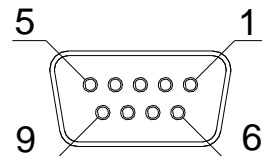


## H. Pin Assignment

### a) RS-232 Interface

#### DB 9 Female

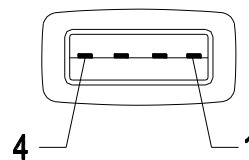
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



### b) USB Interface

#### USB A Type Male

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



## I. Reliability

### Life Time

Trigger Switch	1,000,000 times @ 1kg ±50g cycles
MTBF(Calculated)	50,000 hours

### Thermal Shock

High Temp.	60 °C (140 °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 @ 200g/90 °)

Drop Resistance 59.05 inches (150cm) drop on concrete surface

Electro-Static Discharge Both contact and air at up to 16KV