

# SPECIFICATION

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

Attention : \_\_\_\_\_

Your Model No. : \_\_\_\_\_

Champ's Model No. : HC100 Series \_\_\_\_\_

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

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

RECEIPT STATUS

RECEIVED

Date \_\_\_\_\_

Signature \_\_\_\_\_

Title

## A. General

The brand-new design CCD Barcode Scanner feature the accurate regular barcode scanning and easy operating by it's compact size. With remarkable-saving circuit design, this unit can operate with 2 AAA batteries with long-term usage.

This unit supports the on-line scanning (HC-100) or equipped with memory (HC-100M) for up to 2,000 sets of barcode scanning (UPC/EAN). Users will benefit from its compact design and the CCD equipped in-line Barcode Scanner at smallest foot-print in the market !

## B. Models

1.785HC102 : RS232 Interface

2.785HC105 : KBW Interface

3.785HC108 : USB Interface

4.785HC102M : RS232 Interface with 32k memory

## C. Electrical Characteristics

Interface	RS232	KB	USB
Decoder	-----	Included	-----
Processor Type	-----	8051 Compatible	-----
Operating Freq.	-----	29.4912 MHz	-----
Supply Voltage	-----	DC 3V ± 5%	-----
Scan Rate	-----	100±10% scans/sec	-----
Output Voltage(Typ.)	-----	+5V	-----
<b>Power Consumption</b>			
Power On (Typ.)	----- 130mA -----	120mA	----- 125mA -----
Stand by (Typ.)	----- 9mA -----	7mA	----- 7mA -----
Operation (Typ.)	----- 165mA -----	145mA	----- 150mA -----
Reading confirmation	-----	Buzzer & Led	-----

## C. Optical Characteristics

	HC100
Sensor	----- Linear CCD Sensor -----
Light Source	----- Red Leds, 639 nm -----
Ambient Light	----- 2000 LUX MAX. (Sunlight) -----
	----- 4000 LUX MAX. (Fluorescent lamp) -----

## D. Physical Characteristics

### HC100

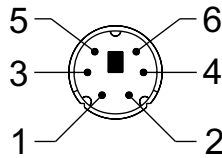
<b>Body Weight</b>	-----	Approx. 2.29 oz (65 gm)	-----
<b>Cable Weight</b>	-----	Approx. 2.65 oz (75 gm)	-----
<b>Body Material</b>	-----	ABS Plastic	-----
<b>Cable Length</b>	-----	5 FT. (150 cm)	-----
<b>Connector</b>	-----	Min USB 5Pin	-----

### Pin Assignment

#### a) Keyboard Interface

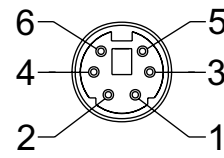
##### MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA
2	NC
3	GND
4	Vcc(+5V)
5	HOST CLK
6	NC



##### MiniDIN 6 FEMALE

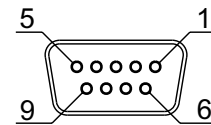
Pin No.	Function
1	KB DATA
2	NC
3	GND
4	Vcc(+5V)
5	KB CLK
6	NC



#### b) RS-232 Interface

##### DB 9 Female

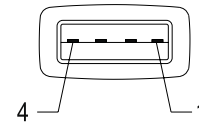
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V



**c) USB Interface**

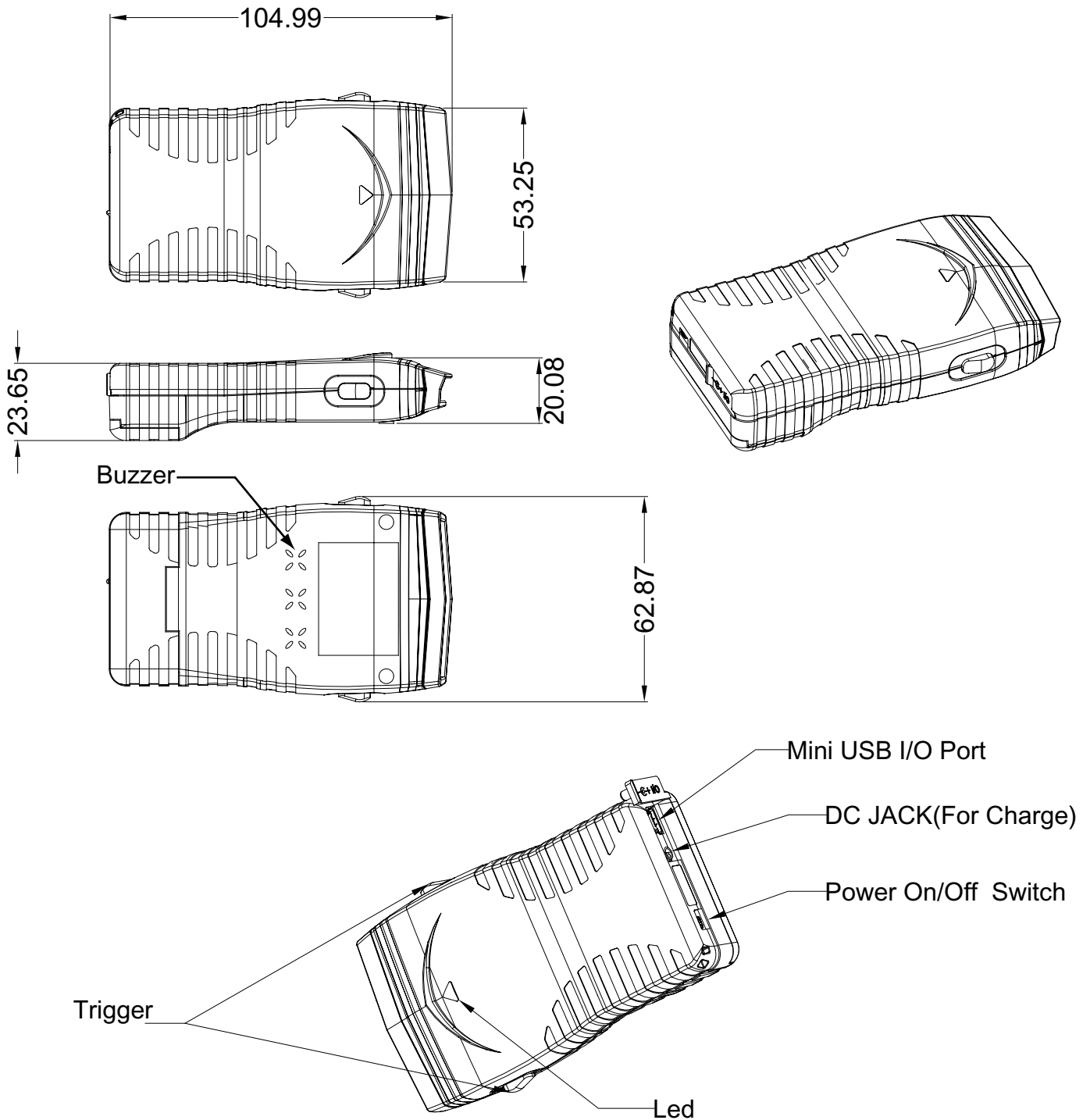
**USB A Type Male**

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



**E. Dimension**

Units:mm



## F. Performance

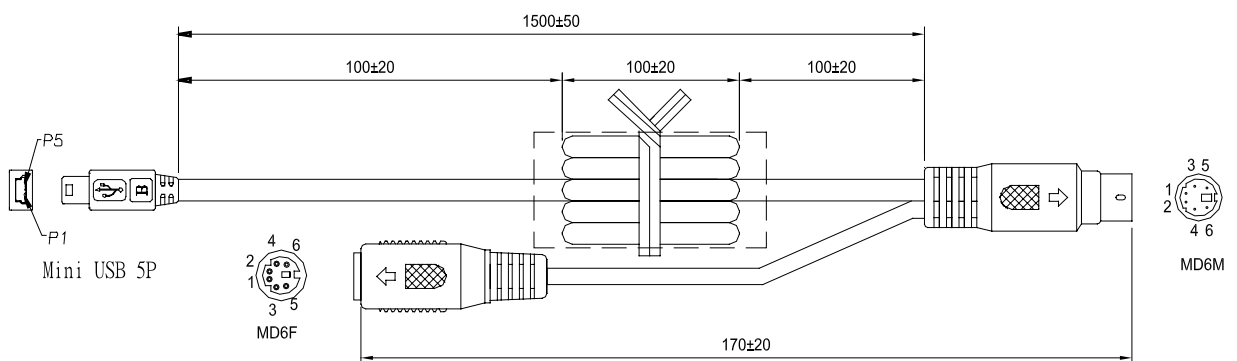
<b>HC100</b>	
<b>Width of Field</b>	----- 1.77 inch (45 mm)-----
<b>Depth of Field</b>	----- Contact type -----
<b>Resolution</b>	----- 5 mil (0.127 mm)-----
<b>Print Contrast Ratio</b>	----- PCS 0.45 / 6 mil code width -----
<b>Reading Angle</b>	Test conditions : Code 39, 10 mil, PCS 0.9
Left & Right(Skew)	----- ±60 ° -----
<b>Dead Zone</b>	----- Forward 5° - 10°-----
<b>Readable Barcode</b>	ALL UPC/EAN/JAN , Code 39, Code 39 Full ASCII, Code 128,Code 93, Interleave 25, Industrial 25, Matrix 25, China Postage, CODABAR/NW7, Code 11, MSI/PLESSEY, Code 32

## G. Environment

<b>Operating Temperature</b>	32°F to 104°F(0°C to 40°C)
<b>Storage Temperature</b>	-4°F to 140°F (-20°C to 60°C)
<b>Relative Humidity</b>	20% to 85% (Non-condensing)
<b>Shock</b>	31.5 inch (80 cm) drop on Concrete Surface
<b>EMI/SAFETY</b>	CE, FCC CLASS A

## H. Cable

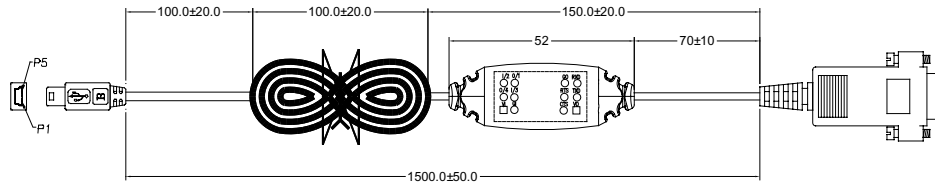
### a)004HC100-PS2 (KBW)



Pin assignment:

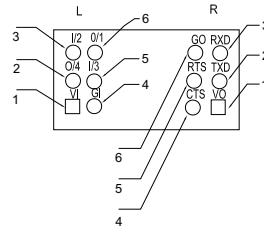
Mini USB 5P	Mini DIN6M	Mini DIN6F	(Color) 顏色	(Function) 功能定義
3	1		綠(Green)	HOST DATA
5	3	3	棕(Brown)	GND
4	5		藍(Blue)	HOST CLK
	4	4	紅(RED)	Vcc
2		5	橙(Orange)	KB CLK
1		1	黃(YELLOW)	KB DATA
	Shell	Shell		SHIELDING

## b)304HC102-DB9 (RS232)

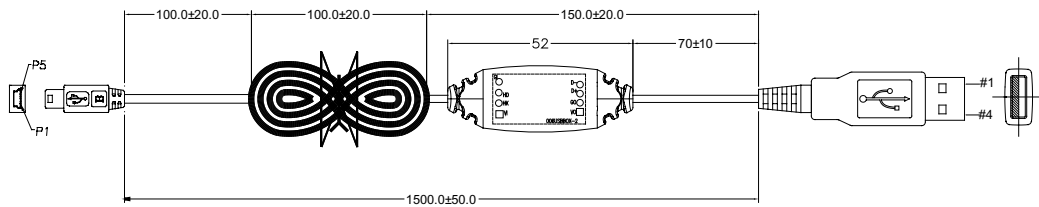


Pin assignment:

MINI USB 5P	L	R	DB9F	(Color) 顏色	(Function) 功能定義
5	4	6	5	棕(Brown)	GND
1	1	1	9	紅(RED)	POWER
3	3	2	2	橙(Orange)	TXD
4	6	3	3	黃(YELLOW)	RXD
5	5	8	8	綠(Green)	RTS
2	4	7	7	藍(Blue)	CTS
外殼 (Shell)	4	6	外殼 (Shell)	纏繞 (Spiral)	遮蔽 (Spiral)



## c)304HC108 (USB)

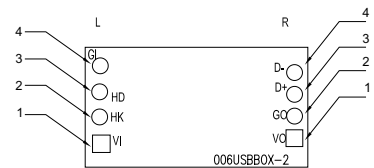


Pin assignment:

Mini USB 5P	L	(Color) 顏色	(Function) 功能定義
3	3	綠(Green)	Host DATA
5	4	棕(Brown)	GND
4	2	藍(Blue)	Host Clk
1	1	紅(RED)	Vcc
4	纏繞 (Spiral)	纏繞 (Spiral)	遮蔽 (Shielding)

USB A TYPE	R	(Color) 顏色	(Function) 功能定義
1	1	紅(RED)	Vcc
2	4	黃(YELLOW)	D-
3	3	橙(Orange)	D+
4	2	棕(Brown)	GND
外殼 (Shell)	2	纏繞 (Spiral)	遮蔽 (Shielding)



*Specifications mentioned in this publication are subject to change without notice.*