

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : SG310 Series _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V00 2008.09.30 _____

Received/Approved by

CHAMPTEK[®]

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Revision History

Version	Date	Context
E00	2008.05.13	Release for EVT
V00	2008.09.30	Release for MP

TABLE OF CONTENTS

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

A. General Description

This brand-new designed handheld CCD scanner has inherited the characteristic of high performance from its previous series. Aside from the principle of excellence mechanical design, it also installs with many user-friendly operations; extra-large trigger enable user to access the trigger in any scanning position, detachable cable, 4-in-1 interface, and 2 years product warranty; these have added-up additional values to it.

Performance: this scanner supports reading depth up to 10 inches, best choice for retailers using POS or regular cash register system. User can program this scanner to “continuous mode” and pair up with matching hand-free stand. Scanning can be an easiest task and be completed with hand-free.

Aid in various major barcodes, hand-on software-programming function, this economical-type barcode scanner is the best choice ever.



B. Physical Characteristics

Weight

Body weight	Approx. 4.594 oz (130 gm)
Cable weight	Approx. 2.65 oz (75 gm) @ KB Interface

Material

ABS

Cable Length

5FT. (150cm)

Connector

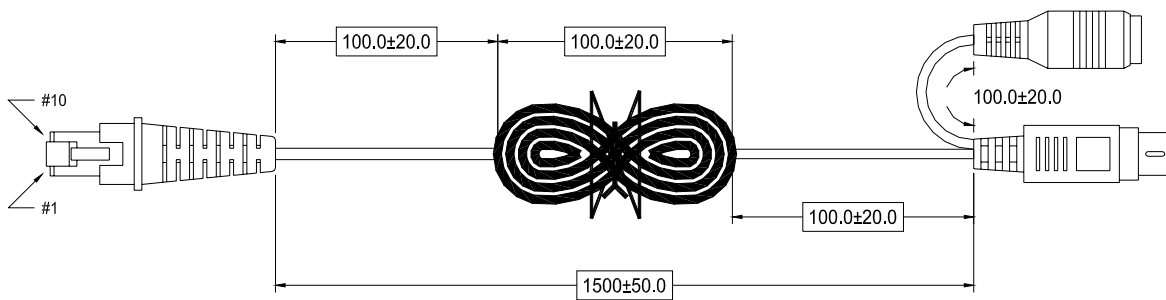
RJ 45C 10Pins

Dimension

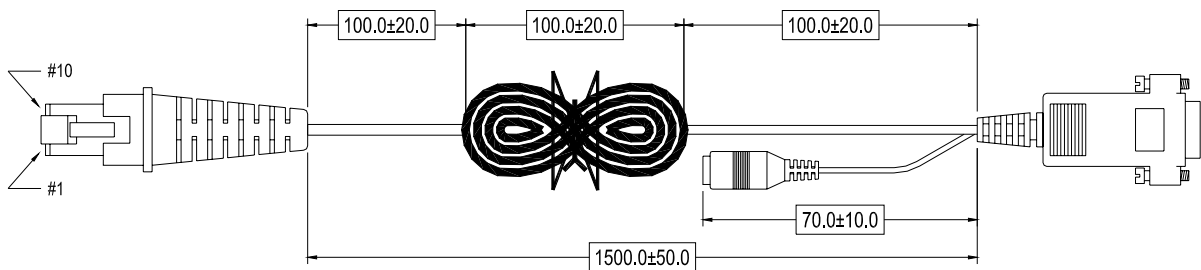
193 mm X 90 mm X 72 mm

a. Cable drawing (Unit:mm)

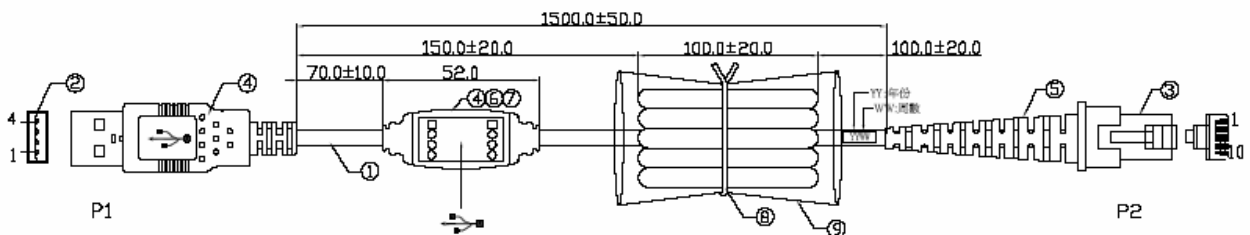
a-1. Keyboard



a-2. RS232



(3) USB



(4)Cable P/N :

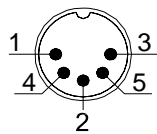
Interface	Color	Cable P/N:
KB	E-Color	0114-25A2111
	Black	0114-25A2121
RS232	E-Color	3114-2201111
	Black	3114-2201121
USB	E-Color	3114-2801111
	Black	3114-2801121

b. Pin Assignment

(1)Keyboard Interface

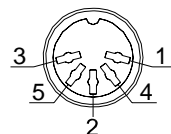
DIN 5 MALE

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



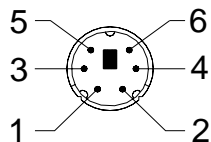
DIN 5 FEMALE

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



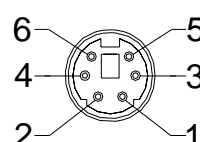
MiniDIN 6 MALE

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



MiniDIN 6 FEMALE

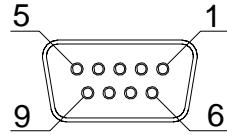
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



(2) RS-232 Interface

DB 9 Female

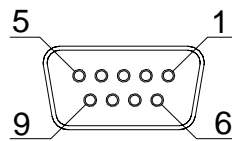
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



(3) WAND Emulation Interface

DB 9 Female

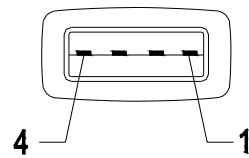
Pin No.	Function
2	DATA
7	GND
9	Vcc



(4) USB Interface

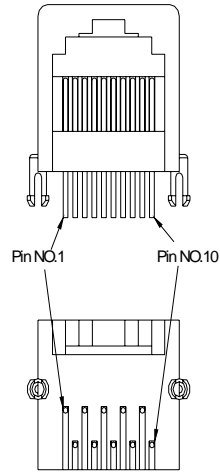
USB A Type Male

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



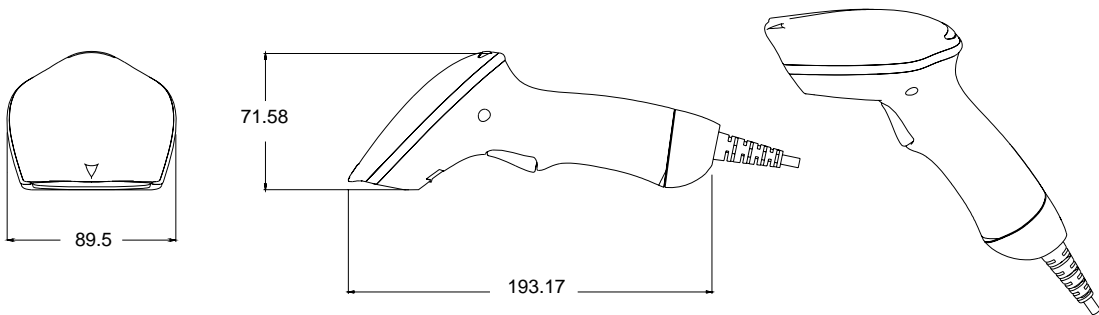
Decoder Data Output

Type	RJ45 10P
Pin No.	Function
1	RTS
2	HOSTDATA
3	GND
4	HOST CLK
5	Vcc (+5V)
6	KB CLK
7	TXD
8	KB DATA
9	RXD
10	CTS

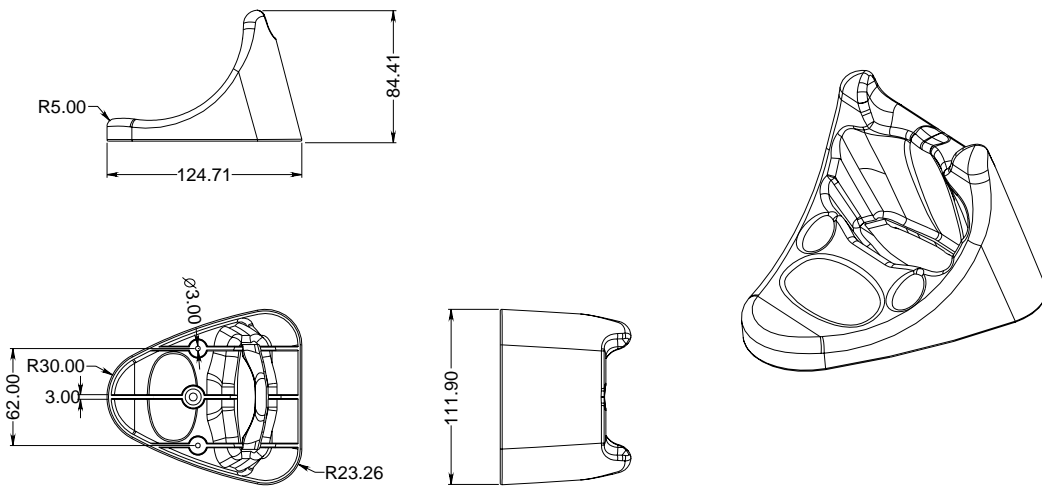


c. Mechanical drawing

(1) Scanner



(2) Holder(Optional)

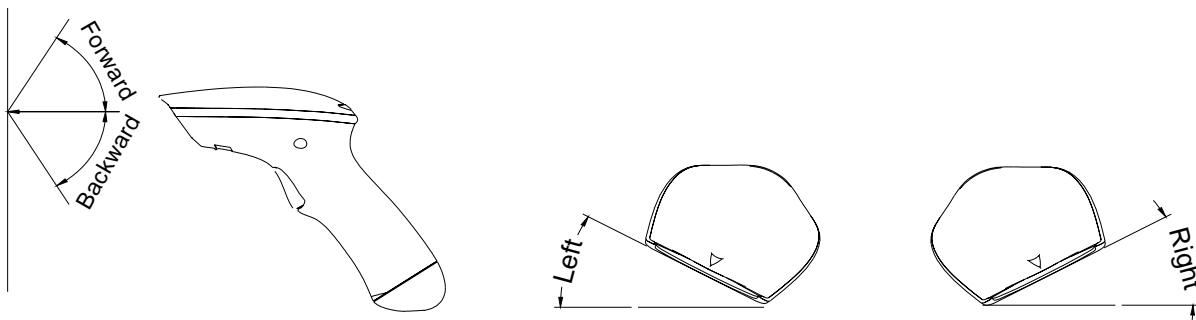


C. Electrical Characteristics

Interface	RS232	KB	USB
Supply Voltage	DC +5V ±5%		
Output Voltage (Typ.)	±9V	+5V	+5V
Output low Voltage (Max.)	-	0.7V	0.4V
Current Draw			
Power On (Typ.)	155 mA	140 mA	145mA
Stand by (Typ.)	45 mA	30 mA	35 mA
Operation (Typ.)	172mA	166 mA	168 mA

D. Performance

Light Source	635 nm
Sensor	Linear CCD Sensor
Processor Type	Single chip 16-bit MCU
Operating Freq.	16 MHz
Scan Rate	300 scans/sec ±10%
Reading Distance	260mm
Width of Field	100 mm
Print Contrast Ratio	PCS 0.45@0.1mm
Resolution	0.1mm @ PCS 0.9
Reading Angle	<i>Test Conditions: Code 39, 10mil, PCS 0.9</i>
Forward & Backward	± 70°
Left & Right	± 60°
Dead Zone	± 5°
Ambient Light	100000 Lux Max. @ Direct sun light



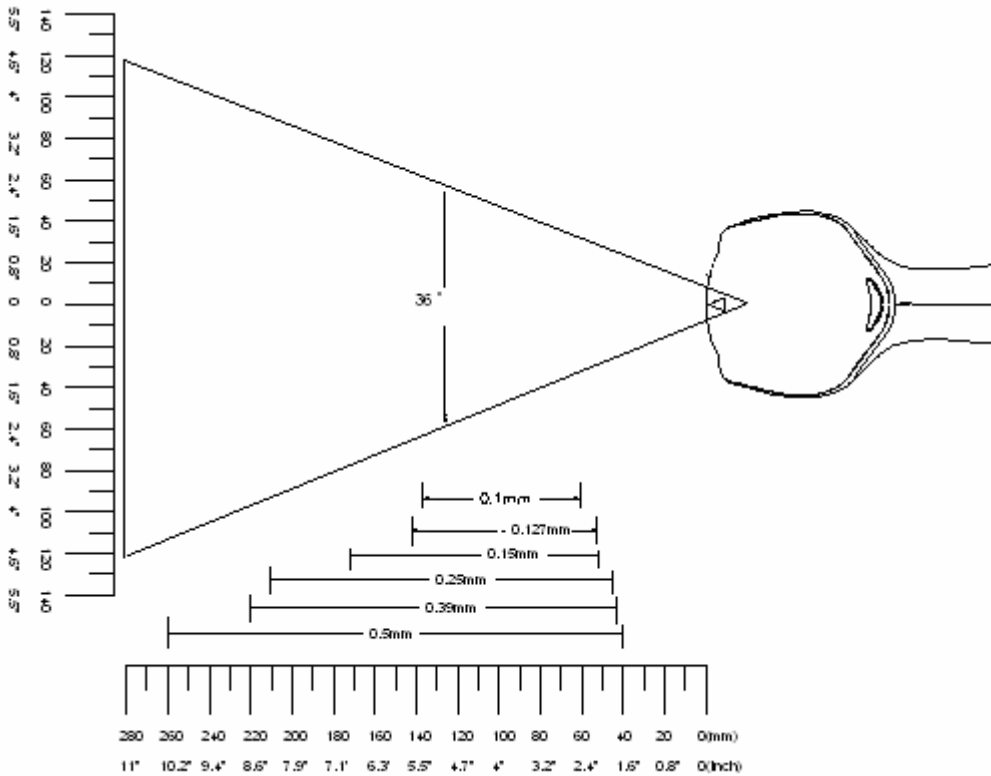
E. Environmental

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

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	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	
Code 26	V	
LCD25	V	
RSS	Optional	

G. Scan Map



H. Reliability

Life Time

Light Source	40,000 hours
Trigger Switch	1,000,000 times
MTBF(Calculated)	20,000 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 @ 500g/90°)

Mechanical Shock 40 inch (100 cm) Drop on Concrete Surface

I. Packing

Dimension

Unit	24 cm X 10.9 cm X 8.6 cm
Carton	57 cm X 37.5 cm X 26.5 cm

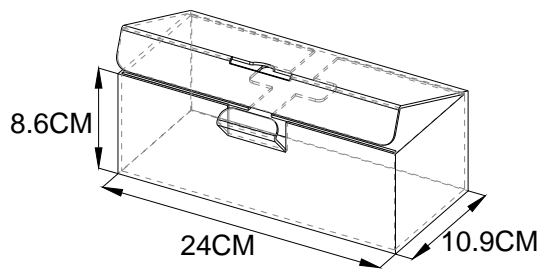
Weight

Unit	345 g
Carton	8 Kg (Q'ty :20 pcs)

Storage

Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	20% to 95% (Non-condensing)

Unit :



Carton:

