

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : SG300 Series _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V02 2009.12.17 _____

Received/Approved by



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Revision History

Version	Date	Context
V00	2008.09.30	Release for Mass production
V01	2009.08.12	Revise Scan map
V02	2009.12.17	Auto sense

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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. Auto-sense Reading Mode

Champtek's SG300 with a futuristic design and high-performance scanning handheld CCD scanner represents the best auto-triggered scanner value.

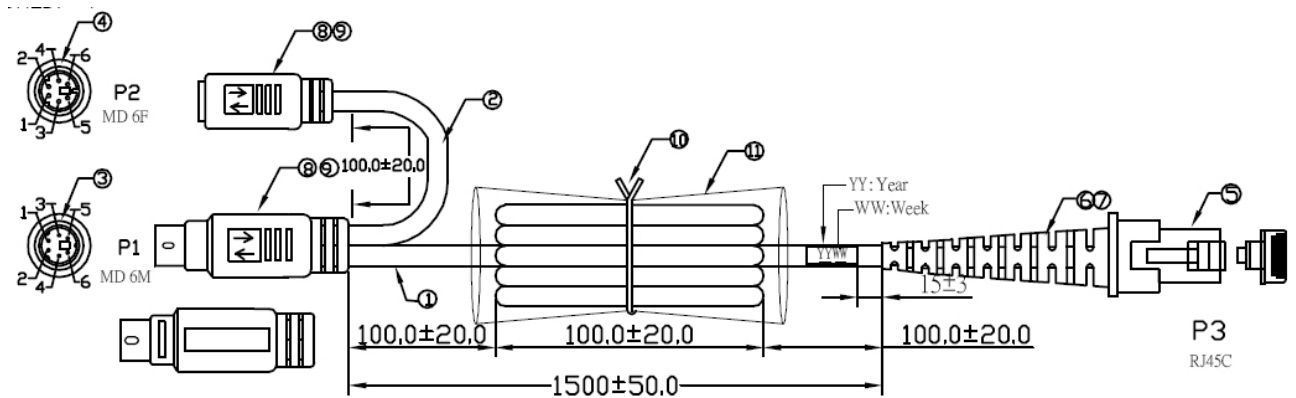
The infrared light source can be sensitive automatically when barcode has been motion in front of SG300 which means activating red light to scanning.

C. Physical Characteristics

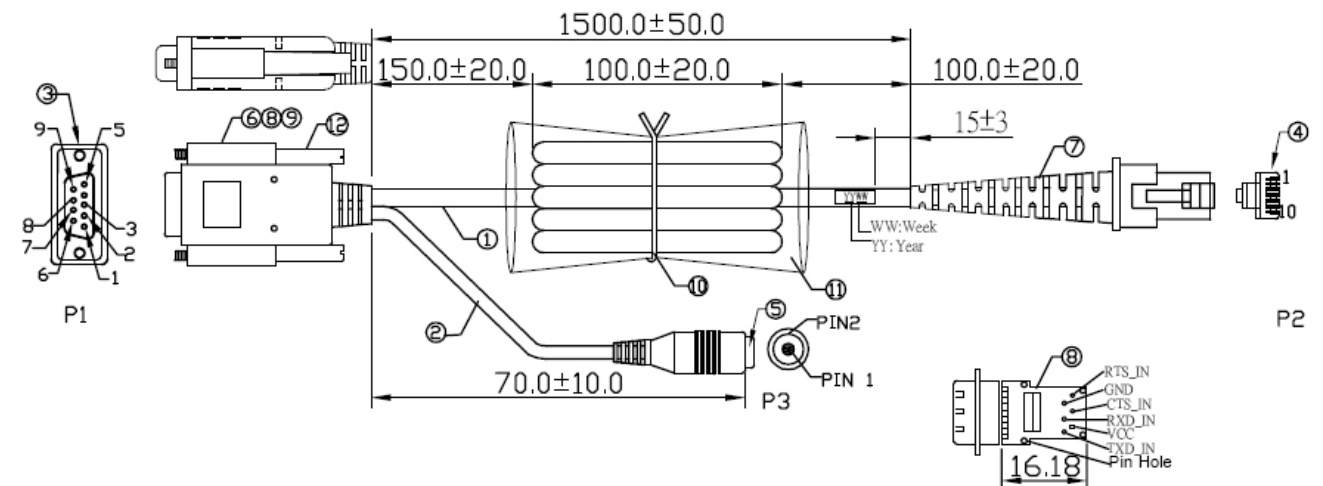
Weight	
Body weight	Approx. 4.6 oz(130 g)(w/o cable)
Material	
	ABS
Cable Length	
	5FT. (150cm)
Connector	
	RJ 45C 10Pins
Dimension	
	193 mm X 90 mm X 72 mm

a. Cable drawing (Unit:mm)

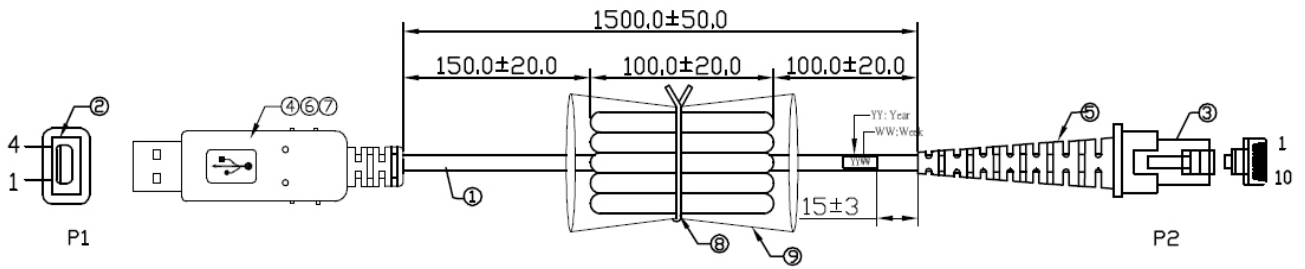
(1) Keyboard



(2) RS232



(3) USB

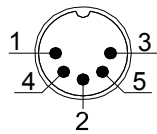


b. Pin Assignment

(1) Keyboard Interface

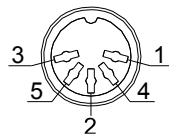
DIN 5 MALE

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



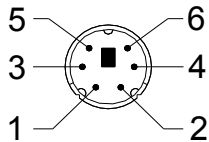
DIN 5 FEMALE

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



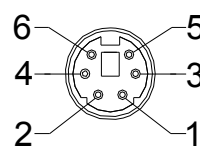
MiniDIN 6 MALE

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



MiniDIN 6 FEMALE

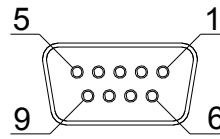
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



(2) RS-232 Interface

DB 9 Female

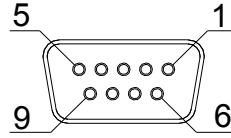
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



(3) WAND Emulation Interface

DB 9 Female

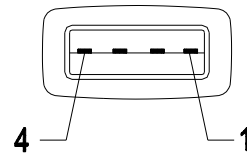
Pin No.	Function
2	DATA
7	GND
9	Vcc



(4) USB Interface

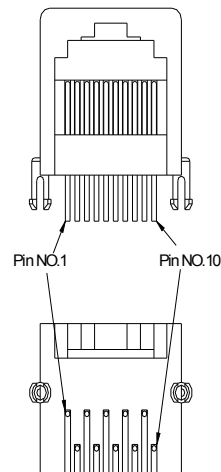
USB A Type Male

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



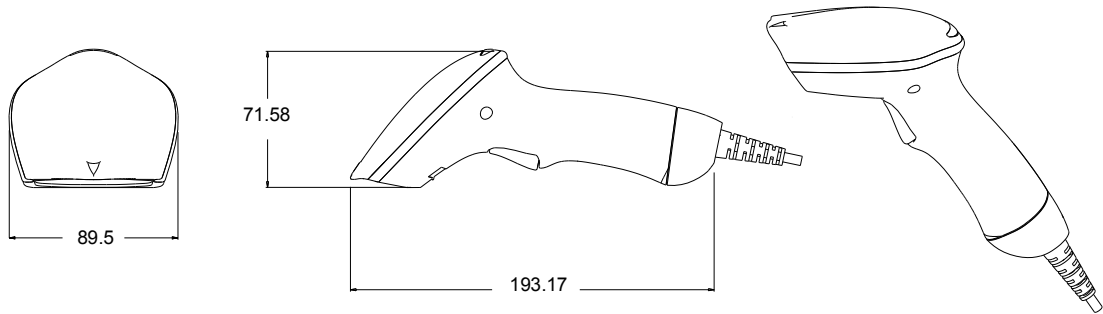
Decoder Data Output

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

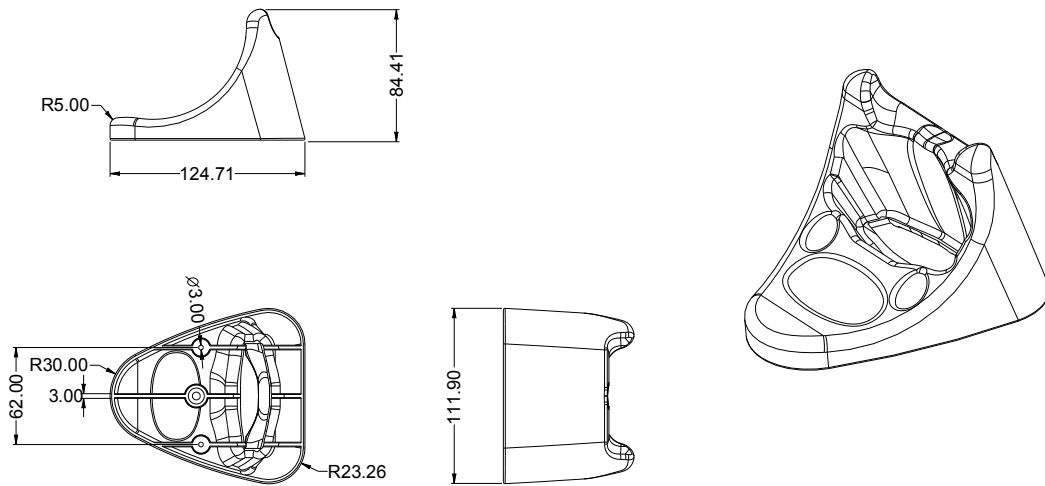


c. Mechanical drawing

(1) Scanner



(2) Holder (Optional)

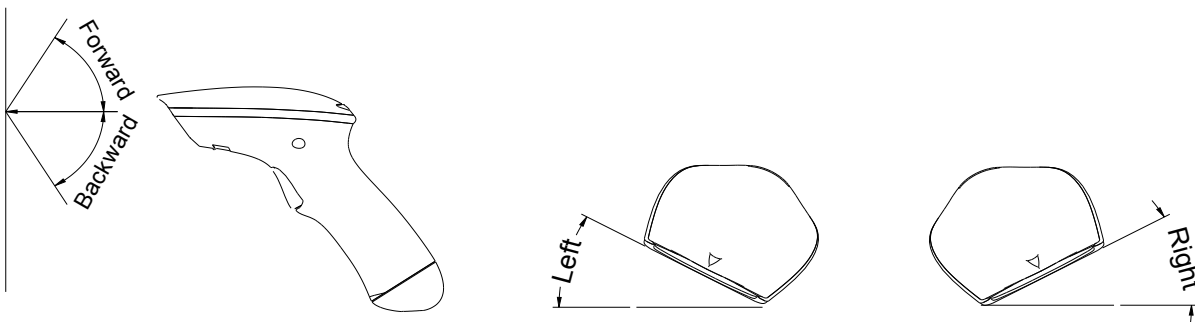


D. Electrical Characteristics

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.)	120 mA	110 mA	120mA
Stand by (Typ.)	25 mA	15 mA	25 mA
Operation (Typ.)	100mA	90 mA	100 mA

E. Performance

Light Source	Visible Red light 635nm LED
Sensor	Linear CCD Sensor
Processor Type	Single chip8-bit MCU
Operating Freq.	24.5 MHz
Scan Rate	300 scans/sec ±10%
Reading Distance	280mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	PCS45%@4mil/0.1mm
Resolution	4mil/0.1mm@PCS90%
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Forward & Backward	10°~65°(±5°)
Left & Right	± 60°(±5°)
Ambient Light	50,000 Lux Max.



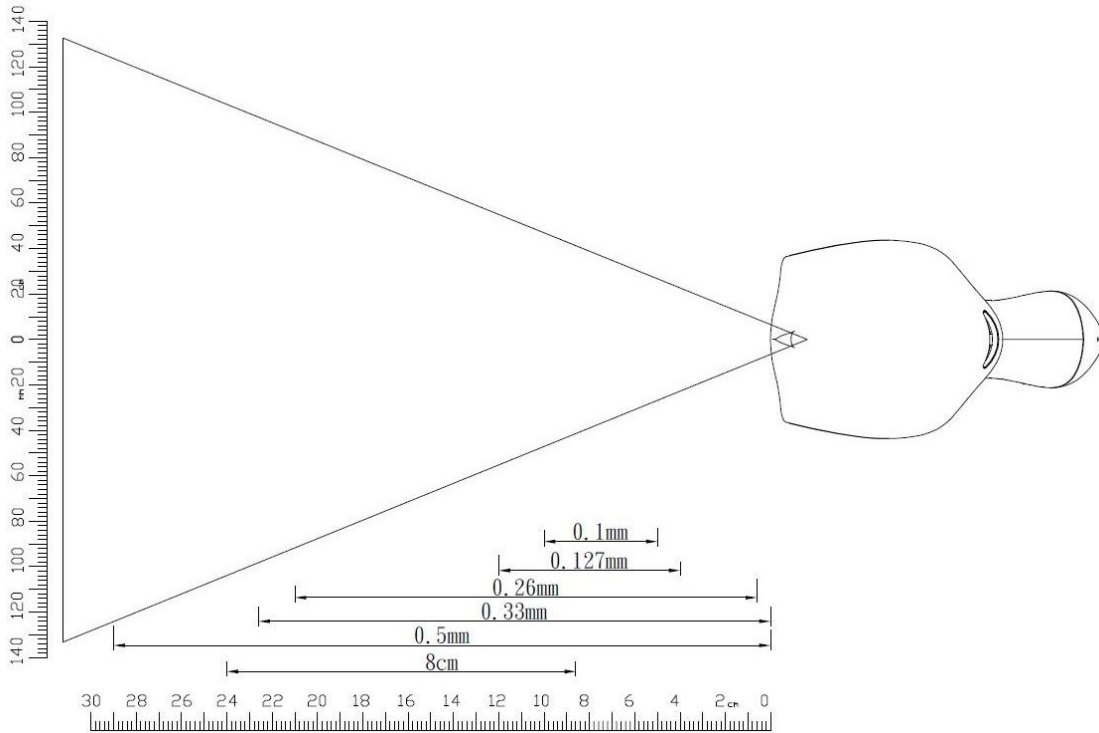
F. Environmental

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)

G. Readable Symbolologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	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	
GS1 DataBar	V	

H. Scan Map



I. Reliability

Life Time

Light Source	40,000 hours
Trigger Switch	1,000,000 times
MTBF(Calculated)	80,000 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 °)

Drop

40 inch(100cm) drop on Concrete Surface

J. Packing

Dimension

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

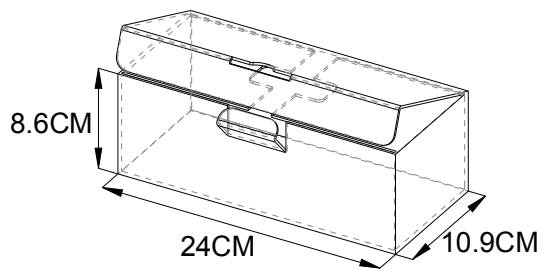
Weight

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:

