

SPECIFICATION

Received/Approved by



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Revision History

Version	Date	Context
V00	2008.09.30	Mass production
V01	2009.08.12	Revise Scan map

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

SG100 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. 4.06 oz(115 g)(w/o cable)

Material

ABS

Cable Length

5FT. (150cm)

Connector

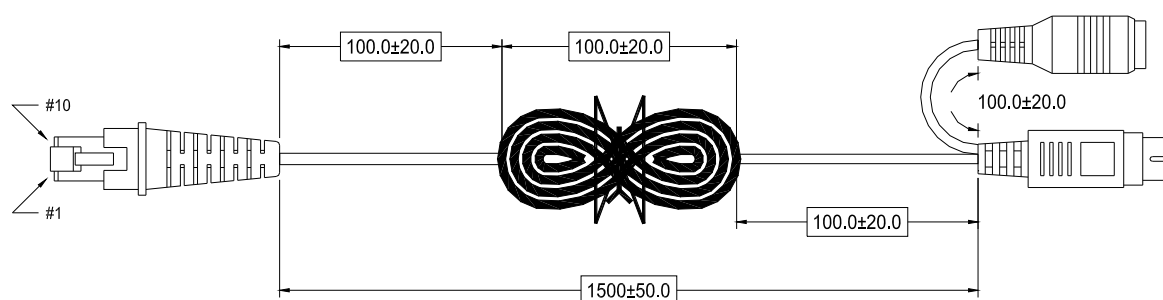
RJ 45C 10Pins

Dimension

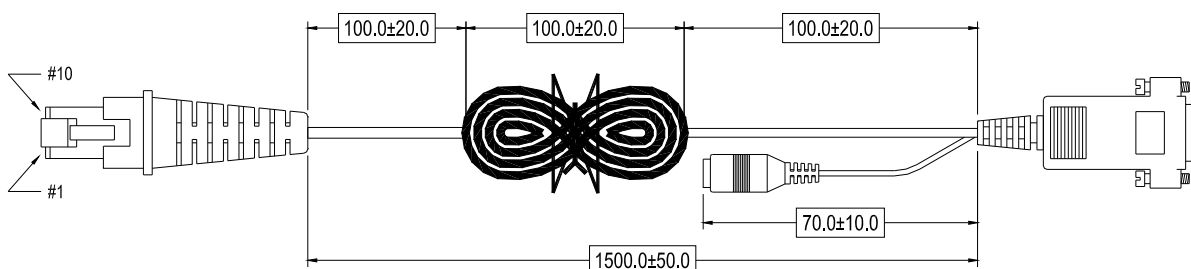
140 mm X 71 mm X 90 mm

a. Cable drawing

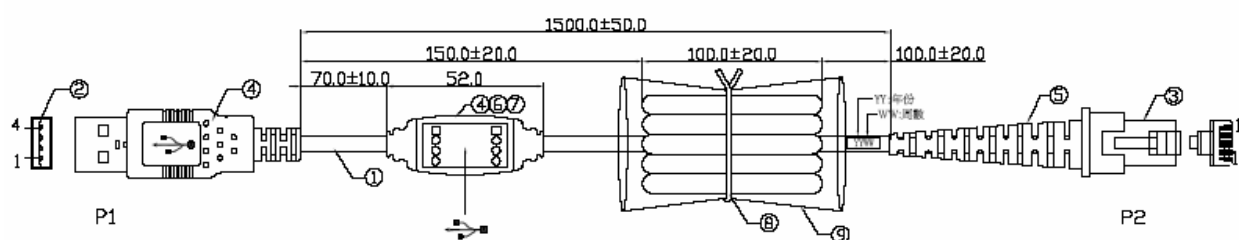
(1) Keyboard cable



(2) RS232 cable



(3) USB cable

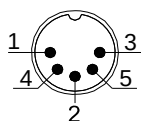


b. Pin Assignment

(1) Keyboard Interface

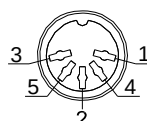
DIN 5 MALE

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



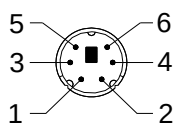
DIN 5 FEMALE

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



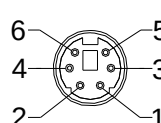
MiniDIN 6 MALE

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



MiniDIN 6 FEMALE

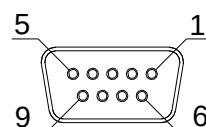
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



(2) RS-232 Interface

DB 9 Female

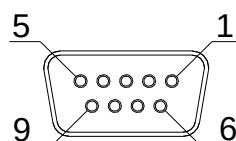
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



(3) WAND Emulation Interface

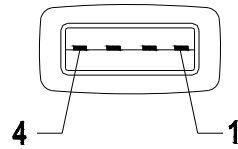
DB 9 Female

Pin No.	Function
2	DATA
7	GND
9	Vcc

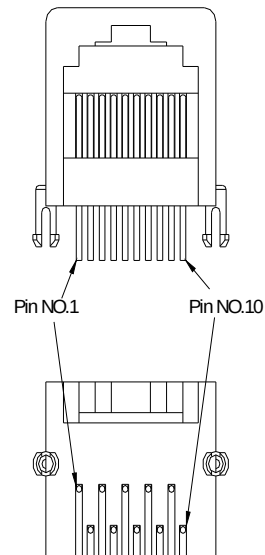


(4) USB Interface**USB A Type Male**

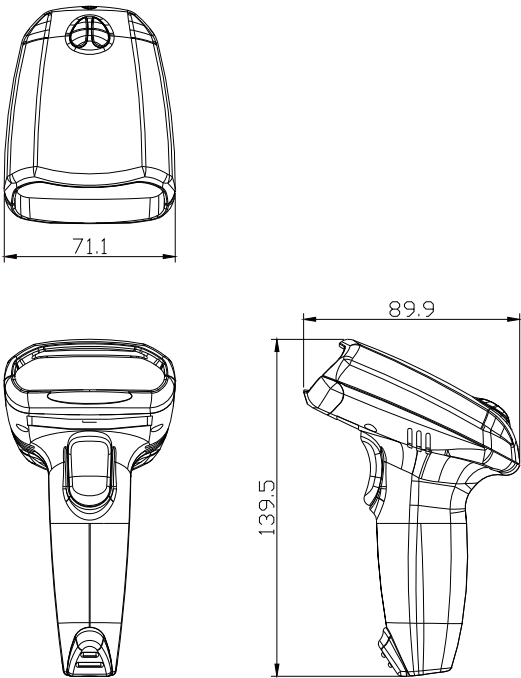
Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND

**(5) Decoder Data Output**

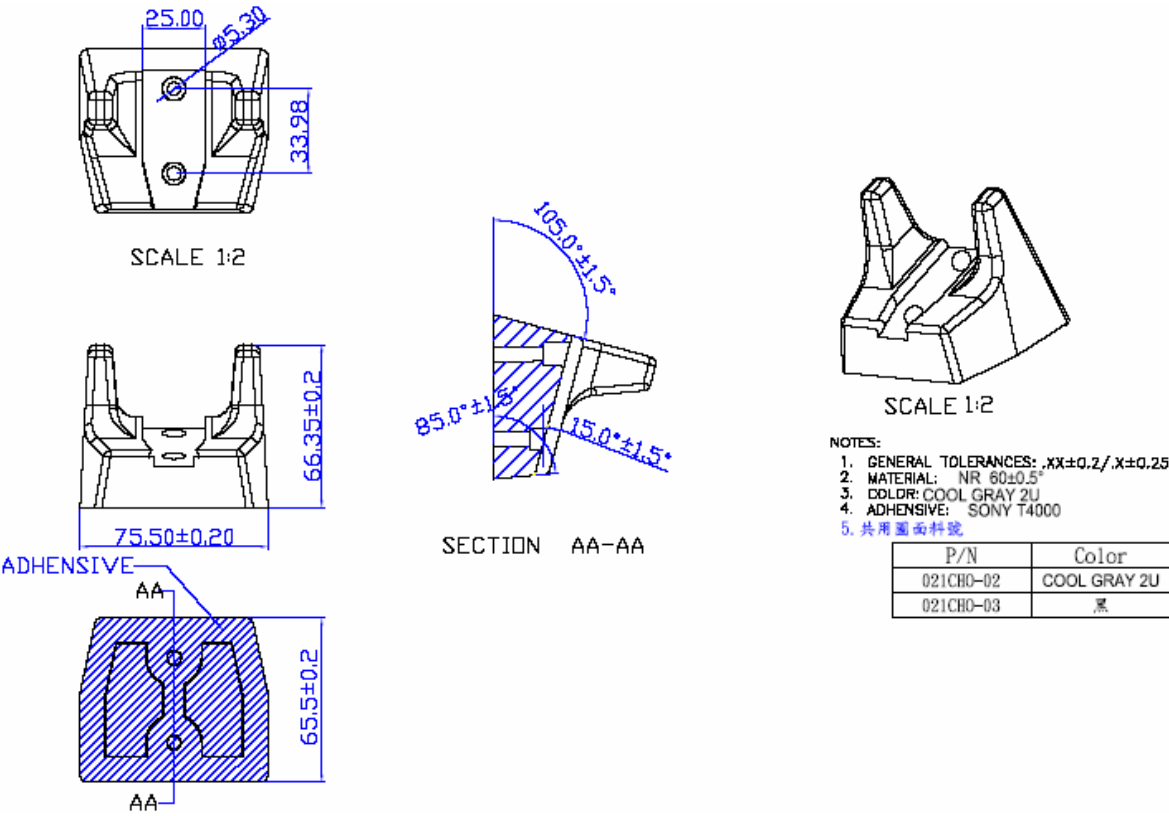
Type	RJ45 10P
Pin No.	Function
1	RTS
2	HOST DATA
3	GND
4	HOST CLK
5	Vcc (+5V)
6	KB CLK
7	TXD
8	KB DATA
9	RXD
10	CTS



c. Mechanical drawing
(1) Scanner



(2) Holder (Optional)

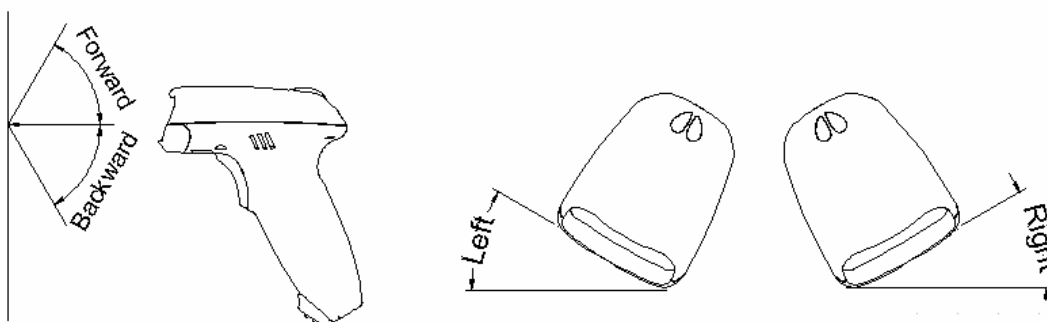


C. Electrical Characteristics

Interface	RS232	WAND Emulation	KB	USB
Supply Voltage	DC +5V $\pm 5\%$			
Output Voltage (Typ.)	$\pm 9V$	+5V	+5V	+5V
Output low Voltage (Max.)	-	0.4V	0.4V	0.4V
Current Draw				
Power On (Typ.)	160 mA	150 mA	150mA	155 mA
Stand by (Typ.)	50 mA	40 mA	40 mA	45 mA
Operation (Typ.)	160 mA	150 mA	150 mA	160 mA

D. Performance

Light Source	Visible Red light 635nm LED
Sensor	Linear CCD Sensor
Processor Type	8051 compatible
Operating Freq.	29.4912 MHz
Scan Rate	150 scans/sec $\pm 10\%$
Reading Distance	260mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	PCS30%@5mil/0.127mm
Resolution	4mil/0.1mm@PCS90%
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Forward&Backward	$10^{\circ} \sim 55^{\circ} (\pm 5^{\circ})$
Left & Right	$\pm 25^{\circ} (\pm 5^{\circ})$
Ambient Light	60000 Lux Max.@Direct sun light



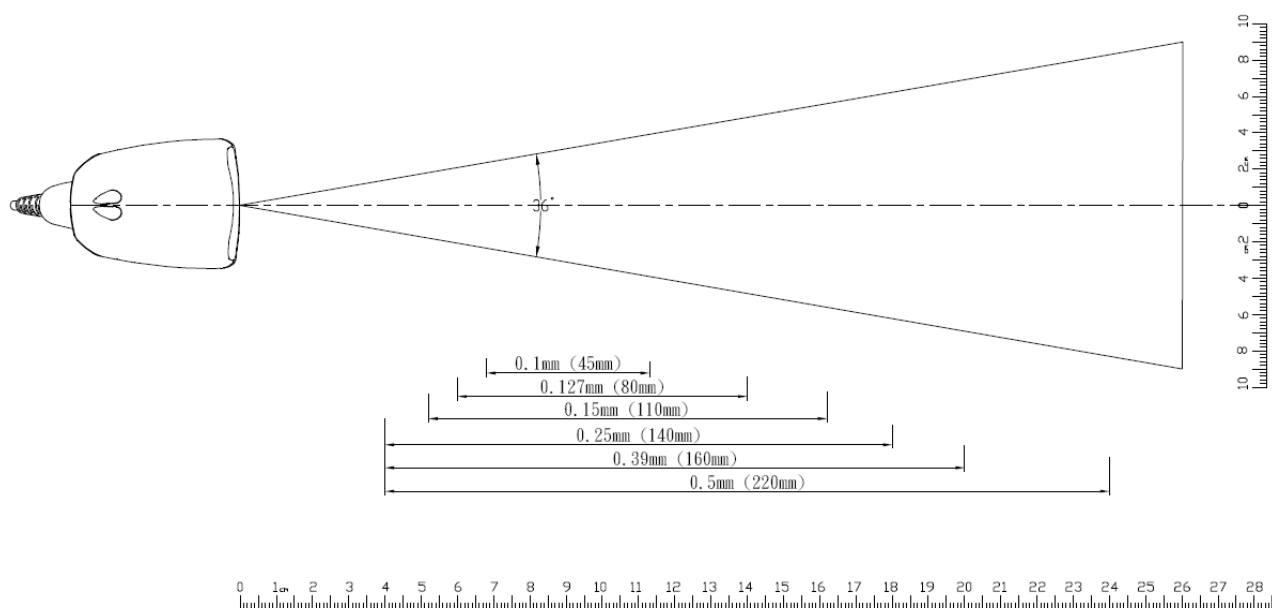
E. Environmental

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 Symbolologies

	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	
GS1 DataBar	V	

G. Scan Map



H. Reliability

Life Time

Light Source	20,000 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

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)