

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : SD380 Linear Imager Bar Code Scanner

Date : _____

Sample Serial No. : _____

Version & Revision Date: V02

2020.08.03

Received/Approved by



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Revision History

Version	Date	Context
V00	2016.09.07	Release
V01	2018.02.23	Performance update
V02	2020.08.03	Sealing and dropping specs

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A. General Description

The SD380 linear 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 SD380's features and its outstanding price-performance ratio make it the best solution for retail and light industrial applications.

The SD380 provides a 'black' or 'warn 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 bar codes and GS1 DataBar™ symbologies, including damaged, poorly printed and codes on display, reducing processing time and labor costs, while increasing accuracy.

Its barcode programming menus provides extensive configuration options. A stand or holder option can be ordered to facilitate hand-free reading option and configured to its auto-sense reading can extend its lifespan.

The SD380 provides customers with the most cost-effective solution in the market and is the best choice for any retail environments.



Features

- The best price-performance ratio solution for retail and light industrial applications.
- Available for Gray and Black color choice.
- Reading depth from window up to 200mm.
- Support minimum resolution 4 mil/0.1 mm.
- Reads most 1D bar code symbologies includes GS1 Databar codes.
- Support multiple Interface options, USB / RS-232 / Keyboard Wedge.
- A stand or holder option can be ordered to facilitate hand-free reading option.
- Facilitates both contact and air 16KV Electro-Static discharge.
- Designed as IP41 sealing protection and 180cm dropping resistance.
- Applicable on Android tablet or smart phone with optional cable.

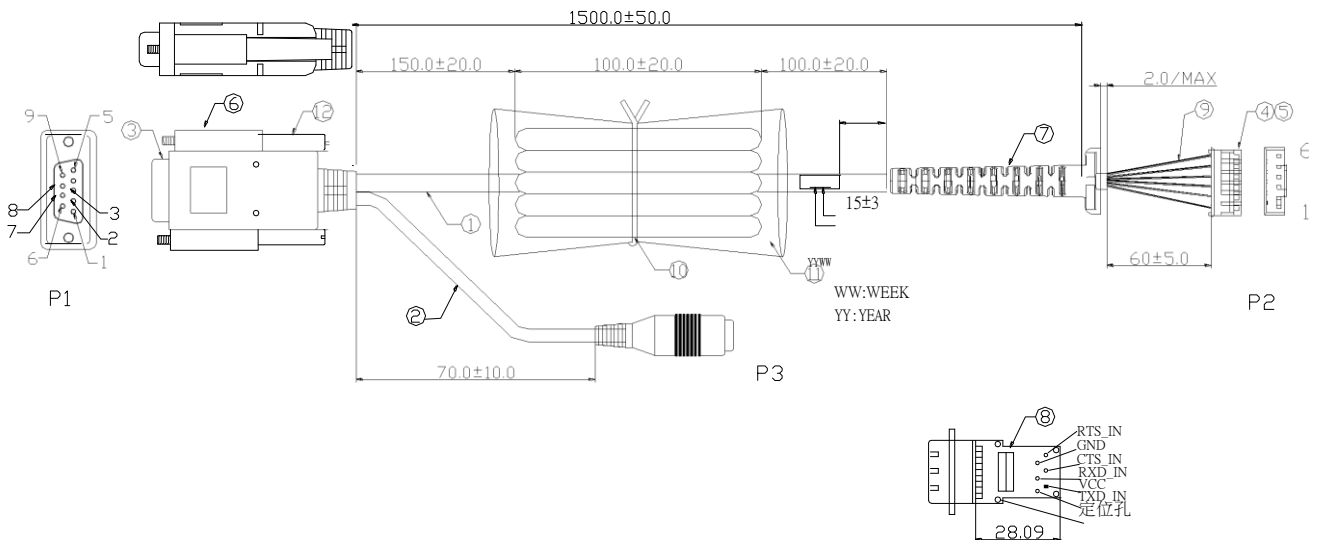
B. Physical Characteristics

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

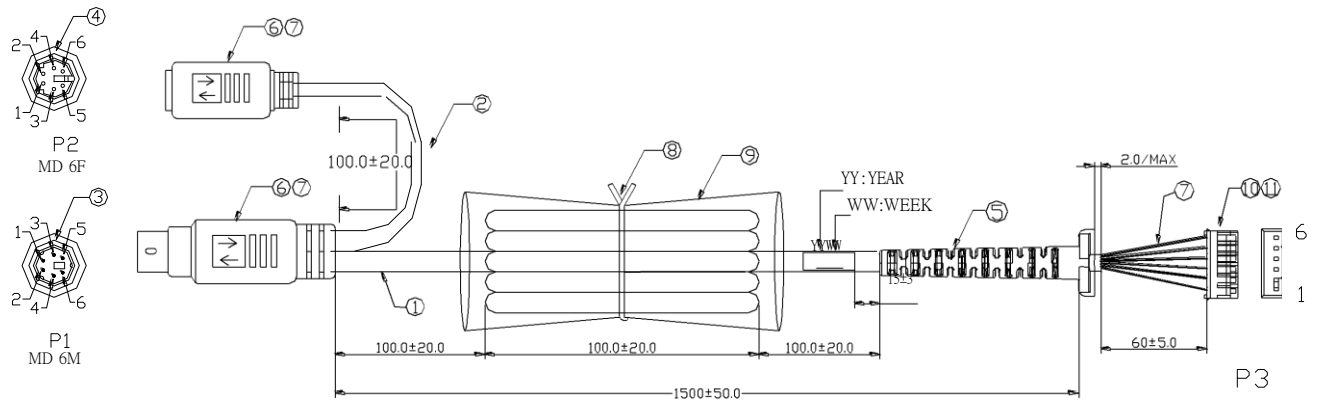
RS232 Interface :

Unit :mm



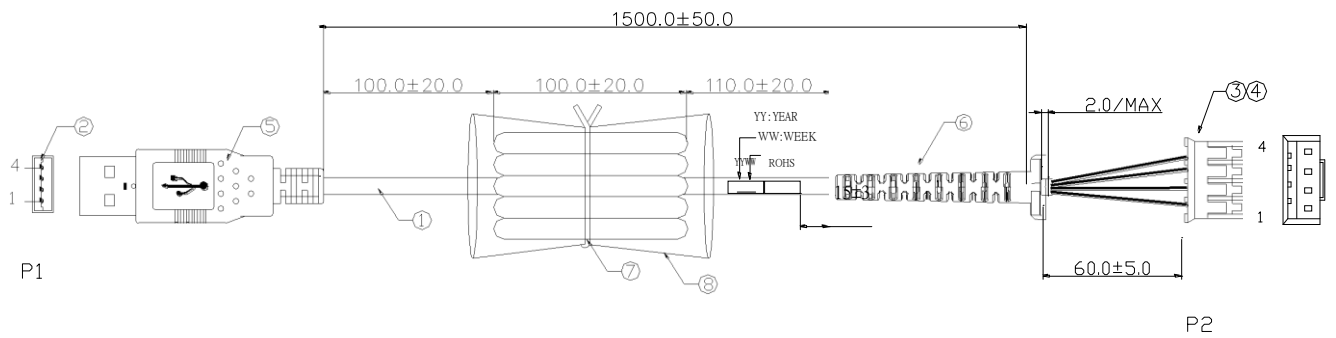
Keyboard Interface :

Unit : mm



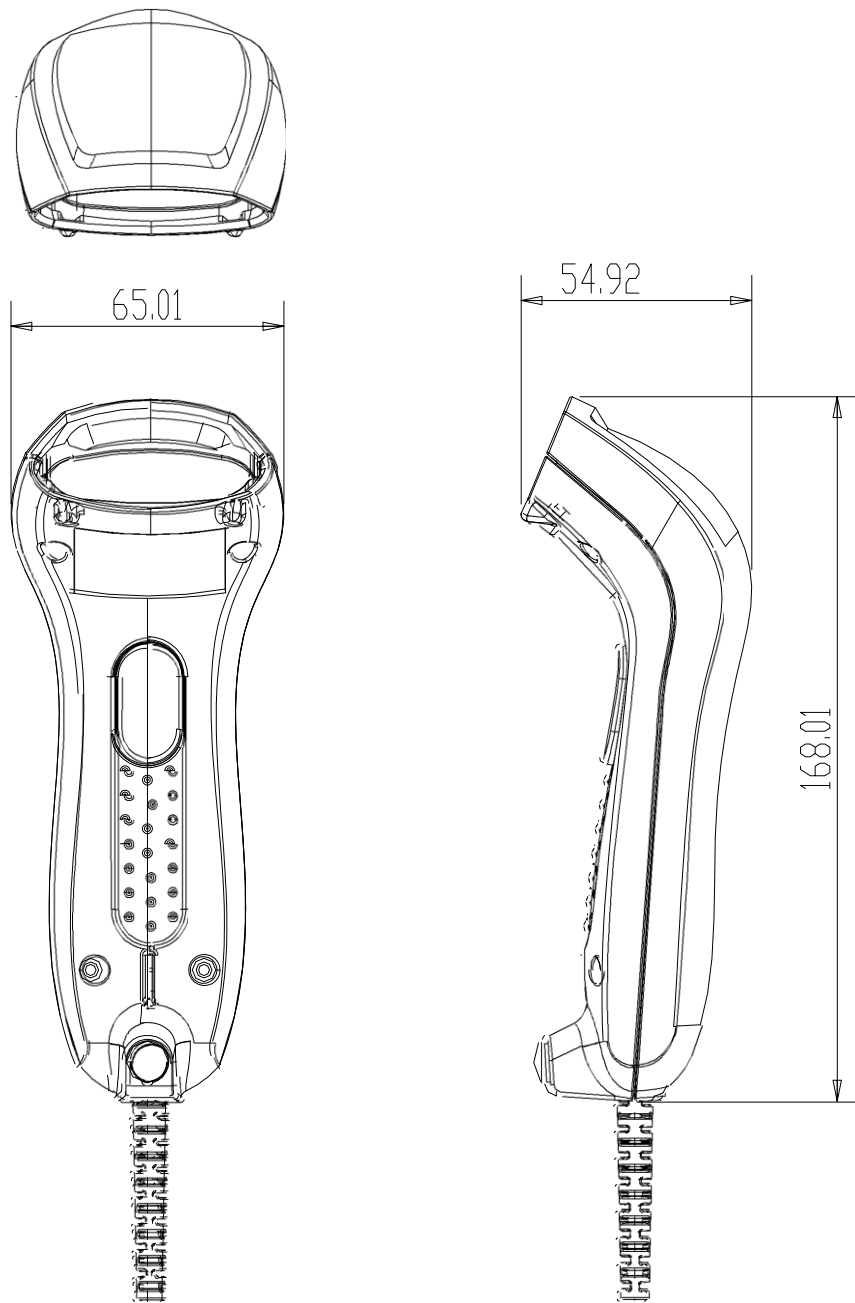
USB Interface :

Unit : mm



Mechanical drawing

Unit : mm



C. Electrical Characteristics

Interface	RS232	USB	KB
Supply Voltage		DC +5V ±5%	
Output Voltage (Typ.)	±9V	+5V±5%	+5V±5%
Output low Voltage (Max.)	-	0.7V	0.7V
Current Draw		±10%	
Power On (Typ.)	250 mA	250 mA	250 mA
Stand by (Typ.)	58 mA	58 mA	58 mA
Operation (Typ.)	224 mA	242 mA	242 mA

D. Performance

Light Source	Visible Red light 632nm LED
Sensor	Linear Sensor
Processor Type	ARM 32-bit CPU
Operating Freq.	8 MHz (Internal)
Scan Speed	100 scans per second ±10%
Reading Distance	From contact up to 200mm@20mil/0.5mm, PCS90%
Width of Field	40mm@ Contact ,10mil/0.25mm , PCS90%
Print Contrast Ratio	25%
Resolution	4mil / 0.1mm@PCS90%,CODE39
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Pitch Angle	±5°~65°
Skew Angle	±5°~65°
Ambient Light	
Fluorescent lamp	10,000 Lux. Maximum

E. Environmental

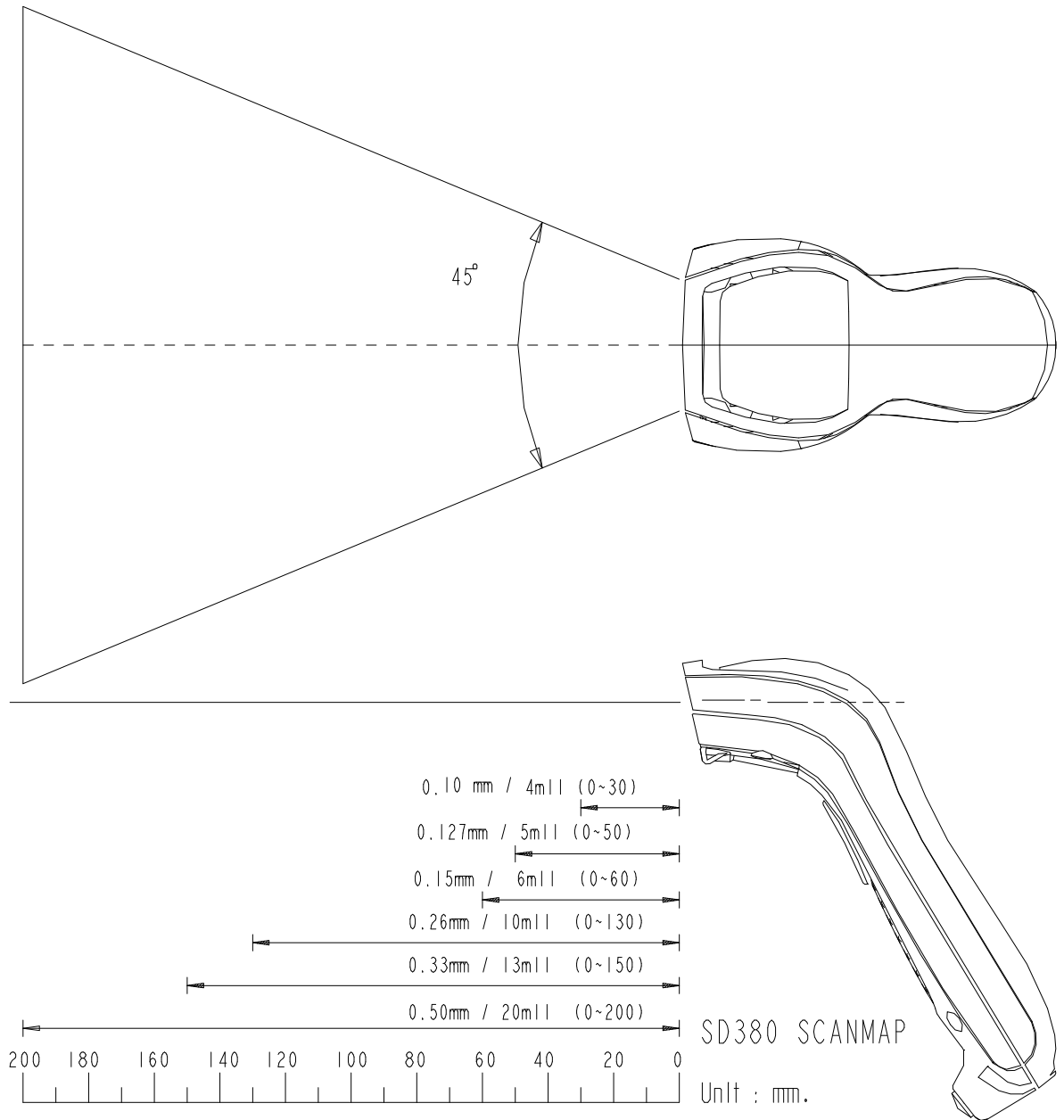
Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative Humidity	20% to 95% (Non-condensing)

F. Readable Symbologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	
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	
MSI/PLESSEY	V	
Code 93	V	
China Postage	V	
GS1 DataBar	V	

G. Scan Map

PCS 90% CODE 39 at fluorescent lamp 750 Lux. ($\pm 10\%$).

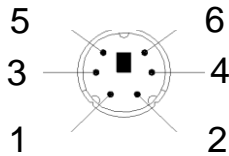


H. Pin Assignment

a) Keyboard Interface

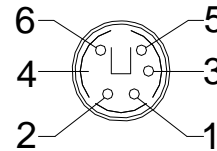
MiniDIN 6 MALE

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



MiniDIN 6 FEMALE

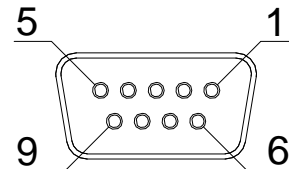
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



b) RS-232 Interface

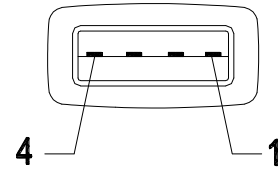
DB 9 Female

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



c) 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 \pm 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	40,000 times minimum (30 times/min @ 200g/90 °)
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Drop	70.86 inches (180cm) drop on concrete surface
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Electro-Static Discharge	Both contact and air at up to 16KV
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Sealing	IP41 water and dust protection
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