



# SG800/SG801

## Linear Imager Barcode Scanner

**CHAMPTEK**<sup>®</sup>  
We value your ID's

### Introduction

SG800/SG801 is a brand new general purpose gun-type linear imager barcode scanner which is designed especially for retail, logistic and warehousing management market. We include friendly functions with replaceable multiple interface cable options that makes it more easily to be operated by the customers to accommodate itself to user environment.

SG800/SG801 has most modern design with rugged casing and supports IP42 sealing protection, with its auto-shuttle-emulation alike smart detection, offers superior decoding performance on a reading speed up to 500 scans per second and up to 550mm reading depth for the majority of 1D barcodes and GS1 DataBar™ codes. A stand option can be ordered to facilitate hand-free reading options.

At auto-sense mode, it senses an object approaching and turns on the light to read barcodes. With its Intelligent Activation. It automatically switches from button trigger mode to auto-sense mode while placing scanner on stand.

In short, SG800/SG801 provides customer with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retail and logistic environment.

### Features

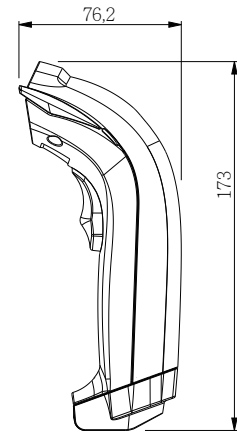
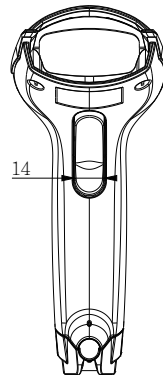
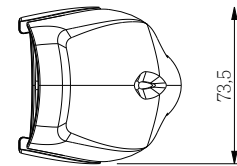
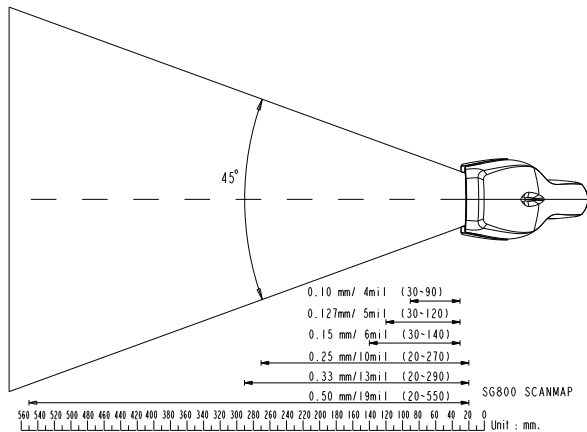
- Support major 1D and GS1 Databar linear and stacked codes.
- Various configurable reading modes supported.
- Smart detection, reading speed up to 500 scans per second.
- Support automatic sense reading and is able to read under 0 Lux dark environment.
- Support multiple interface options, USB HID, Virtual COM and RS-232.
- Designed as IP42 sealing protection.
- With intelligent activation\*, it automatically switches over to automatic-sense reading while placed on the stand.

Note: \*Only for SG801

- Both contact and air 16KV Electro-Static discharge.
- A stand option can be ordered to facilitate hand-free reading options.
- Vibration when scanning (optional)
- Applicable on Android tablet or smart phone with optional cable.



# SG800/SG801 Scan Map



Unit: mm

## Specifications

### Physical Characteristics

Weight	
Body weight	Approx. 110 g / 3.88 oz
Material	ABS/Rubber
Dimension	73.50mm W x 173mm D x 76.2mm H
Color Available	Black/Gray

### Electrical Characteristics

Interface	RS232	USB
Supply Voltage		
Output Voltage (Typ.)	±9V	+5V
Current Draw		
Power On (Typ.)	160 mA	140 mA
Stand by (Typ.)	50 mA	45 mA
Operation (Typ.)	110 mA	100 mA

### Performance

Light Source	Visible Red light 635±5nm LED
Sensor	Linear CCD Sensor
Scan Speed	Smart detection, up to 500 scans per second
Reading Distance	Up to 550mm@20mil/0.5mm, PCS90%, Code39
Print Contrast Ratio (Minimum)	25%
Resolution	4mil/0.1mm@PCS90%, Code39
Indicator	Beep and LED (Good read Green)
Reading Angle	Test Conditions : Code 39, 10mil/0.25mm,PCS90%
Pitch Angle	±10°~65° (±5°)
Skew Tolerance	±60° (±5°)
Ambient Light	100,000 Lux Max.
Sealing	IP42 water and dust protection

### 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)

### Reliability

Life Time	
Trigger Switch	1,000,000 times
MTBF(Calculated)	50,000 hours
Thermal Shock	
High Temp.	50 °C (122 °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 Resistance	70.86 inches (180cm) drop on concrete surface

### Readable Symbolgies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	
Code39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
MSI/PLESSEY	V	
Code 93	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

Due to Champtek/Scantech ID's continuing product improvement programs, specifications and features are subject to change