



# IG520

## High performance 2D Barcode Scanner

SCANTECH ID<sup>®</sup>  
CHAMPTEK Group

### Introduction

IG520 is a general purpose, good performance 2D 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.

IG520 has modern design and good performance for the majority of 1D and 2D bar codes, Post code, Composite codes, and OCR-B character reading to increase your productivity. It can easily read the barcodes on label, display and other media.

An optional stand can be ordered to facilitate hand-free reading application.

### Features

- Support most 1D, 2D codes, GS1 databar, Post code, Composite codes and OCR-B Character.
- Good performance on both display and printed label reading.
- Support USB HID, Virtual COM and RS-232 interfaces.
- Interface cable is replaceable.
- An optional stand can be ordered to facilitate hand-free reading application.



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Barcode	Depth of field
0.076mm/3mil Code39	60 ~ 110 mm
0.1mm/4mil Code39	60 ~ 150 mm
0.25mm/10mil Code39	40 ~ 220 mm
1mm/40mil Code39	50 ~ 650 mm
0.33mm/13mil UPC/EAN	30 ~ 260mm
20mil QR Code	30 ~ 320 mm
8mil Data Matrix	40 ~ 135 mm
8mil PDF417	20 ~ 200 mm

The test is under ambient light 400 ~ 500 Lux.

## Specifications

### Physical Characteristics

<b>Weight</b>	
Body weight	Approx. 110g / 3,38 oz (without cable)
<b>Material</b>	
	ABS
<b>Cable length</b>	
	180cm
<b>Dimension</b>	
	L167x W70 x H88mm
<b>Color Available</b>	
	Black body, dark gray button and windows side

### Electrical Characteristics

<b>Interface</b>	RS232	USB
<b>Supply Voltage</b>		
<b>Output Voltage (Typ.)</b>	±9V	+5V
<b>Output low Voltage (Max.)</b>	-	0.7V
<b>Current Draw</b>		
<b>Stand by (Typ.)</b>	120 mA	120 mA
<b>Operation (Typ.)</b>	< 236mA	< 236mA

### Performance

<b>Light Source</b>	White light illumination, Red bar aimer
<b>Sensor</b>	1280(H) x 800(V) pixels
<b>Field of view</b>	Horizontal – 35°, Vertical – 27°
<b>Motion tolerance</b>	35cm per second
<b>Reading Distance</b>	420 mm@20mil/0.5mm, PCS90%, Code39
<b>Print contrast ratio</b>	PCS15%
<b>Resolution</b>	1D: 3mil/0.076mm PCS90%, Code39 2D: 7mil/0.18mm PCS90%, QRCode
<b>Reading Angle</b>	
Pitch Angle	5°~60° (±5°)
Skew Tolerance	5°~55° (±5°)
<b>Ambient Light</b>	100,000 Lux Max.

### Environmental

<b>Operating Temperature</b>	-20 °C to 50 °C (-4 °F to 122 °F)
<b>Storage Temperature</b>	-20 °C to 60 °C (-4 °F to 140 °F)
<b>Relative Humidity</b>	5% to 95% (Non-condensing)

### Reliability

<b>Life Time</b>	
Trigger Switch	1,000,000 times @1kg ±50g cycles
MTBF (calculated)	50,000 hours
<b>Thermal Shock</b>	
High Temp.	60 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
<b>Cycle time</b>	30 minutes for high temp. , 30 minutes for low temp.
<b>Cycles</b>	24 cycles
<b>Drop Resistance</b>	47.2 inches (120cm) drop on concrete surface

### Readable Symbolologies

#### 1D Symbolologies

UPC-A, UPC-E, EAN-8, EAN-13, ISBN, ISSN, Code 128, GS1-128, ISBT, Code 39, Code 32, Code 93, Code 11, Codabar(NW-7) , Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5(Straight 2 of 5) , Standard 2 of 5(IATA 2 of 5) , NEC 2of 5, MSI, Telepen, Trioptic, BC412, Febraban, Coupon.

#### 2D Symbolologies

QR Code, Micro QR Code, Data Matrix, PDF417, Micro PDF 417, MaxiCode, Aztec, HanXin Code, Pharma Code(One-Track), Codablock A, Codablock F, Dot Code, Grid Matrix.

#### Post code

HongKong 2 of 5(China Post), Korea Post, Australian Post, British Post, USPS Intelligent Mail, Japanese Post, Planet Code, Postnet Code, UPU 4-State, KIX Code.

#### Composite code

GS1 Databar(Omnidirectional, Limited, Expanded), GS1 Composite Code, TLC 39 Code.

#### OCR character

OCR-B and Chinese ID Card OCR .