IG820/IG821

Area Imager Barcode Scanner

SCANTECH ID ®
CHAMPTEK Group

Introduction

IG820/IG821 is a brand new general purpose gun-type Area 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.

IG820/IG821 has most modern design with rugged casing and supports IP42 sealing protection, with its unmatched performance for the majority of 1D and 2D bar codes increasing your productivity. An optional stand can be ordered to facilitate hand-free reading application.

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

In short, IG820/IG821 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.
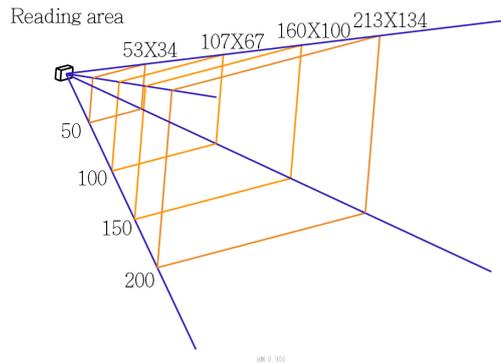
Features

- Support 1D, 2D and GS1 Databar codes.
- Good reading performance, e.g. good reading of QR code in 30% damage or even one finder pattern is missing.
- Good performance on both display and printed label reading.
- 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 (Only for IG821), it automatically switches over to automatic-sense reading while placed on the stand.
- Both contact and air 16KV Electro-Static discharge.
- A stand option can be ordered to facilitate hand-free reading options.
- Vibration when scanning (optional)
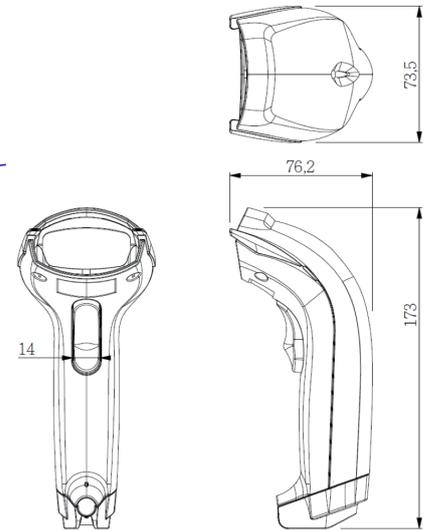- Applicable on Android tablet or smart phone with optional cable.

IG820/IG821

Barcode	Depth of field
3mil Code39	30~ 70 mm
4mil Code39	20~ 80 mm
5mil Code39	20~100 mm
6mil Code39	20~120 mm
10mil Code39	20~170 mm
13mil Code39	20~200 mm
20mil Code39	20~250 mm
20mil QR Code	20~180 mm
20mil PDF417	20~110 mm
20mil Data Matrix	20~180 mm

Reading area

53X34 107X67 160X100 213X134

50
100
150
200

Note:
The test is under ambient light 700 ~ 800 Lux.

Mechanical Drawing
Unit: mm

73,5
76,2
173
14

Specifications

• Physical Characteristics

Weight	
Body weight	Approx. 110g / 3,88 oz
Material	ABS / Rubber
Cable Length	5FT.（150cm）
Dimension	73.5 mm W x 76.2 mm H x 173.0 mm L
Color Available	Black/Gray

• Electrical Characteristics

Interface	RS232	USB
Supply Voltage		
Output Voltage (Typ.)	±9V	+5V
Output low Voltage (Max.)	-	0.7V
Current Draw		
Stand by (Typ.)	45 mA	40mA
Operation (Typ.)	440 mA	370 mA

• Performance

Light Source	White light LED
Sensor	1280 (H) x 800 (V) pixels
Field of view	Horizontal – 55°, Vertical – 35°
Scan Rate	60 fps (at full resolution)
Reading Distance	250mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	PCS30%@5mil/0.127mm
Resolution	3mil/0.076mm@PCS90% Code39, 8mil/0.2mm@PCS90% QRCode
Reading Angle	Test Conditions : Code 39, 10mil/0.25mm,PCS90%
Pitch Angle	±5°~60°
Skew Angle	±5°~60°
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 @1kg ±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	25,000 times minimum (30 times/min @ 200g/90°)
Drop Resistance	70.86 inches (180cm) drop on concrete surface
Electro-Static Discharge	Both contact and air at up to 16KV

• Readable Symbologies

1D Symbologies
UPC-A, UPC-E, EAN-8/JAN-8, EAN-13/JAN-13, ISSN, UCC Coupon Extended Code, Code 39, Code 39 Full ASCII, Code 128, Interleaved 25, Industrial 25, Matrix 25, Codabar/NW7, Code 93, China Post, MSI/Plessey, Telepen, GS1 Databar Omni-directional, GS1 Databar Limited, GS1 Databar Expended

2D Symbologies
Data Matrix, PDF 417, QR Code , Aztec , Micro PDF 417, Micro QR Code, Dotcode
Option: Maxicode , Han Xin Code

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

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