

FV3X Series

Compact Industrial Barcode Reader

Product Features

- Embedded product; Ultra-small structure
Easy to be integrated with equipments

Dimensions: 40.0mmX37.4mmX26.9mm

- Megapixel combines with good illumination

1280*800 Pixel CMOS
Taking the lead in providing polarized lighting

- Excellent DPM code reading ability
Keep up with the development of
code reading applications

Applicable for normal barcodes and DPM codes
Dynamic exposure can automatically adapt to more
code reading requirements

- Support common communication modes
Suitable for most equipment integration
requirements

The body interface supports Serial port / USB (simu-
lated keyboard, simulated Serial port) communication
modes
The interface automatically adapts to cable switching

Industry Applications



Medical Testing Equipment
Code Reading Integration



Test Instrument Code
Reading Integration



Self-service Terminals Code
Reading Integration



Printing, inkjet code, etc.,
Encoding Match

Technical Specifications

Sensor	1/4 inch CMOS, global shutter
Image Resolution	1280X800
Collection Speed	Up to 72 frame/s
Focusing Mode	Fixed focus
Lens Focal Length	FV31: 4mm FV31L/FV32: 6mm
Viewing Angle	FV31: 48° (horizontal) FV31L/FV32: 34° (horizontal)
Trigger Mode	Command trigger, I/O trigger, Continuous reading mode, Key trigger, Induction mode
LED Indicator	3 LED indicator lights (power, reading success, reading failure)
Illumination Source Type	Body light source: 2LED(high-brightness) Auxiliary light sources: 4LED(high-brightness or polarized)
Illumination Source Color	Body light source: Red LED Auxiliary light source: Red or White LED
Aiming Mode	Laser cross aiming
Laser Safety Level	Class 2
Communication Modes	RS232, USB (simulated Serial port, simulated Keyboard)
Power Supply	5VDC / USB Power supply
Power Consumption	1.2W (standby status), 1.75W (in average), 2W (peak)

Operation Current	Standby: 240mA, Average: 350mA, Maximum: 400mA
Number of Input Signals	1
Type of Input Signals	NPN or PNP
Number of Output Signals	2
Type of Output Signals	Voltage signal
Shell Material	Aluminum alloy
Weight	38g (Excluding cables)
Dimensions (L x W x H)	40.0mm x 37.4mm x 26.9mm
Operating Temperature	-10 ~ 50 °C
Storage Temperature	-20 ~ 65 °C
Relative Humidity	5% ~ 95% non-condensing
Vibration Resistance	10 to 55 Hz: Double amplitude 2.5mm / 3 hours in X, Y or Z direction
IP Rating	IP54
EMC	EN55032:2015, EN55024:2010
Certifications	CE, RoHS
Readable Code Symbologies	1D, 2D and stacked codes that meet national and international standards
Maximum Reading Accuracy	FV31/FV31L: 1D code 3mil / 2D code 5mil; FV32: 1D code 2mil / 2D code 3mil

Reading Distance

Unit : (mm)

Barcode Specifications	FV31		FV31L	
	Nearest	Farthest	Nearest	Farthest
3.34mil Code128	50	110	60	110
5mil Code128	40	130	60	120
6.67mil Code 128	40	140	50	140
10mil Code 128	40	160	30	150
15mil Code 128	40	190	40	180
5mil DataMatrix	40	110	70	110
6.67mil DataMatrix	40	120	60	110
10mil DataMatrix	40	150	50	130
15mil DataMatrix	40	160	50	150

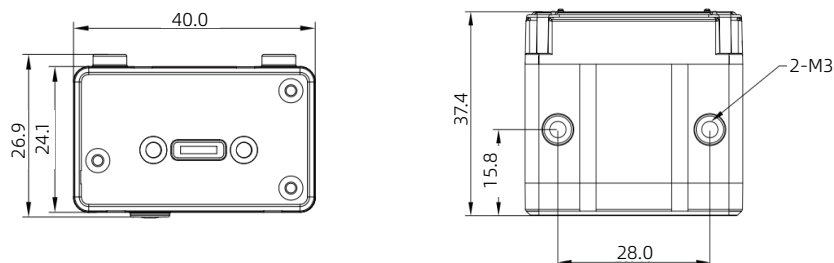
Reading Distance	FV31		FV31L	
	X-axis Visual Field	Y-axis Visual Field	X-axis Visual Field	Y-axis Visual Field
50	40	30	30	20
100	90	60	70	40
150	130	80	100	60
200	170	110	130	80

Standard Models Configuration Table

Model	Descriptions
FV31-2110	1280*800 Pixels, Red LED light source, Standard light, Standard viewing angle
FV31-2100	1280*800 Pixels, White LED light source, Standard light, Standard viewing angle
FV31-2200	1280*800 Pixels, White LED light source, Polarized light, Standard viewing angle
FV31L-2110	1280*800 Pixels, Red LED light source, Standard light, Narrow viewing angle
FV31L-2100	1280*800 Pixels, White LED light source, Standard light, Narrow viewing angle
FV31L-2200	1280*800 Pixels, White LED light source, Polarized light, Narrow viewing angle
FV32-2110	1280*800 Pixels, Red LED light source, Standard light, High accuracy
FV32-2100	1280*800 Pixels, White LED light source, Standard light, High accuracy
FV32-2200	1280*800 Pixels, White LED light source, Polarized light, High accuracy

Dimensions

Unit: (mm)



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