



# FV63L(V2.0)

## Compact Industrial Autofocus Barcode Scanner

FV63L(V2.0) is the latest upgraded version of the FV63L series released in 2024. A dedicated model for DPM code identification has been added to this product series, which uses a DPM code lighting module (including polarization and atomization light sources). The brightness and layout of the light source are further optimized, and the DPM algorithm is further upgraded. It is a cost-effective choice for reading challenging DPM barcodes. FV63L(V2.0) is a high-quality industrial barcode reader with autofocus function, DPM code reading ability, good dynamic code reading performance and miniaturization design. It is an appropriate choice for diversified application fields in industrial manufacturing.

### Product Features

#### ■ Dedicated model provided for DPM code reading

Provide DPM code lighting module (including polarized and atomized light sources). The layout and brightness of the body light source are optimized for more uniform illumination. Optimization of one-click automatic parameter tuning, making DPM code reading operations no longer cumbersome.

#### ■ Good dynamic reading performance

Adopting global shutter CMOS. Provide a collection rate of 60 frames per second. 100% improvement in illumination brightness and dynamic code reading speed compared to the last generation.

#### ■ Meet various industrial scenarios, with better versatility

Supports NPN and PNP trigger signals  
Graphical settings of interface logic  
Dealing with complex signals and data interactions  
The product itself supports multiple industrial Ethernet protocols  
Dealing with mainstream PLC communication integration  
Rich software features such as one-click configuration / multiple exposure polling / 10 sets of built-in configurations

#### ■ Autofocus function

Micro-drive focusing technology is adopted to achieve automatic focusing at different installation positions  
Good working distance coverage, 60-400mm@10mil C128

## Industry Applications



Automated  
Production Line



Integration of  
Test Instruments



Robot Integration



Laser/Inkjet Code and  
Other Coding Match



Automation Equipment  
Integration

## Technical Parameters

Sensor Type	1/4 inch CMOS sensor, black and white
Image Resolution	1280x800
Acquisition Speed	60 FPS
Lens Type	Autofocus
Lens Focal Length	5.5mm
Viewing Angle	38° (horizontal), 24° (vertical)
Trigger Mode	Command trigger; I/O trigger; Presentation mode; Continuous reading mode; Key trigger
LED Indicator	Top: 4 LED Indicators (Power - red, Reading success - blue, Reading failure - red, Automatic parameter adjustment - red)
Reading Area Indicator	Reading success - blue, Reading failure - red
Light Source Type	12 LEDs, High-brightness / Polarization / Atomization+Polarization combination for DPM code reading
Light Source Color	Red
Aiming Mode	Laser cross aiming
Laser Safety Level	Class 2
Communication Interface	Ethernet, Serial port, USB
Communication Protocol	Ethernet: TCP/IP, Profinet, Modbus TCP, EtherNet/IP Serial port: RS232 USB: Simulated Serial port, Simulated keyboard
Power Supply	20~30 VDC
Power Consumption	Standby power consumption: 1.9W Maximum power consumption: 18W
Number of Input Signals	2

Type of Input Signals	NPN or PNP
Effective Voltage of Input Signal	NPN: ≤16VDC, PNP: ≥5VDC (Max: 24VDC)
Number of Output Signals	2
Type of Output Signals	Voltage signal
Output Load Capacity	Single Maximum: 100mA@24VDC Total Maximum: 200mA@24VDC
Shell Material	Aluminum alloy
Weight	138±5g (excluding cables)
Dimensions (L×W×H)	57.0mmx42.0mmx29.3mm (excluding cables)
Operating Temperature	0 ~ 55 °C
Storage Temperature	-20 ~ 70 °C
Relative Humidity	0 ~ 95% Non-condensing
Vibration Resistance	10~55 Hz, double amplitude 0.3 mm, 1 hour each in X, Y or Z directions
ESD protection	Air discharge: ± 18KV, Contact discharge: ± 8KV
IP Rating	IP65
Certifications	CE, RoHS
Readable Code Symbolologies	1D, 2D and stacked codes in accordance with national and international standards
Highest Reading Accuracy	1D code: 1.67mil 2D code: 2.5mil

## Reading Distance and Reading Field of Vision

Unit: (mm)

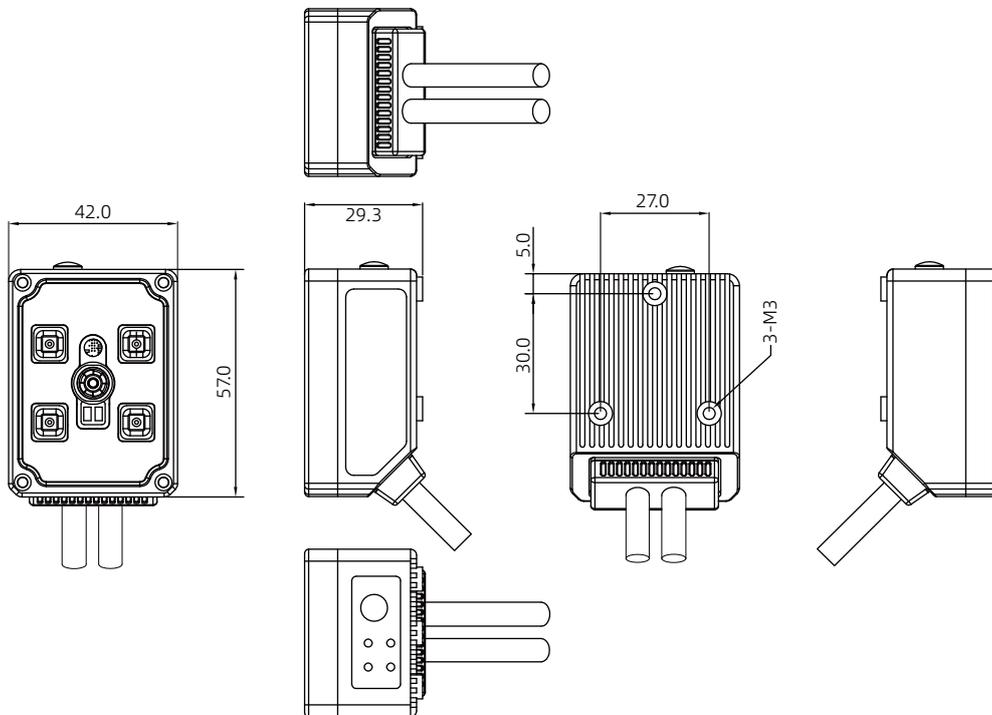
Barcode Specifications	FV63L (V2.0) Series		FV63L (V2.0) Series		
	Nearest	Farthest	Reading Distance	X-axis visual field	Y-axis visual field
3.34mil Code 128	45	160	50	36	23
5mil Code 128	40	240			
6.67mil Code 128	40	330	100	68	42
10mil Code 128	35	490			
15mil Code 128	45	730			
20mil Code 128	55	930	150	101	63
3.34mil DataMatrix	60	100			
5mil DataMatrix	50	105			
6.67mil DataMatrix	43	170			
10mil DataMatrix	40	255	200	135	84
15mil DataMatrix	35	375			
20mil DataMatrix	40	480			
			300	205	127

## Standard Models Configuration Table

FV63L	FV63L-2110 V2.0	1280*800 pixel \ Red bright light \ Auto-focus 5.5mm \ Serial port + Ethernet + USB
	FV63L-2210 V2.0	1280*800 pixel \ Red polarized light \ Auto-focus 5.5mm \ Serial port + Ethernet + USB
	FV63L-2410 V2.0	1280*800 pixel \ DPM dedicated lighting (Atomization+Polarization combination) \ Auto-focus 5.5mm \ Serial port + Ethernet + USB

## Dimensions

Unit: (mm)



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