



FV2X0 Series

Industrial Fixed-mount Barcode Scanner

FV2X0 series is a high-performance intelligent barcode reader launched by infoscan in March 2023. It uses 2 megapixel wide-width and high-frame-rate CMOS, high-power lighting sources and liquid lenses with various specifications to address challenging code reading situations such as large field of vision, long-distance and ultra-high-speed. In addition, FV2X0 series is also equipped with a touch screen, users can complete equipment configuration and status acquisition through the screen.

Product features

■ Significantly improvement of collection visual field

1920 * 1080 pixel high-frame-rate CMOS sensor
Adopt wide-width format, the long side pixel value has been increased from 1280 of the last generation to 1920, the field of vision has been improved by 50%

■ More intelligent industrial barcode reader

The first high-performance barcode reader equipped with a touch screen in China, which can realize offline configuring and quick knowledge of the status of the device
Multiple indicator light feedback allows operators to quickly obtain the barcode reading status
Updated "one-click automatic parameter adjustment" function for faster and better completion of auto-focus and parameters configuration

■ Improve the performance of reading high-speed moving barcodes

The standard lighting model (FV220) uses 16pcs high-brightness lamp beads; enhanced lighting model (FV260) has been expanded to 28pcs lamp beads; ensure sufficient illumination when shooting high-speed moving barcodes
Multi-core processor, high-speed image transmission processing and decoding

■ Innovative light source kits, fast switching of lighting modes

Multiple light source kits (polarized/atomized/combined light sources) enable flexible configuration of lighting
Innovative structural design, complete kit switching in only seconds

Applications



Large view field



Multiple barcodes reading



Wide angle reading



Long-distance reading



High-speed assembly line collection

Technical specifications

	FV220 series	FV260 series
Sensor	1/3 inch CMOS sensor, global shutter	
Image Resolution	1920*1080	
Collection Speed	Up to 100 FPS	
Lens Type	Liquid lens	
Lens Focal Length	FV2X0N: 6mm FV2X0S: 12mm	
Viewing Angle	FV2X0N: 45° (horizontal) 26° (vertical), FV2X0S: 21° (horizontal) 13.5° (vertical)	
Roll/ Pitch/ Yaw	360° (roll) 65° (pitch) 65° (yaw)	
Triggering Mode	Command triggering; I/O triggering; inductive triggering; continuous reading mode; key triggering	
LED Indicator	Top position: 3 LED indicators (power supply, Ethernet connection and sending/receiving status indication); Around the body: blue (reading success), red (reading failure)	
Lighting Source Type	Standard light source - 16pcs LED	Array lighting - 28pcs LED, body light source - high brightness/polarization
Lighting Source Color	Red	
Light Source Kits	Polarized/Atomized/Polarized+Atomized, etc.	NA
Reading Area Indicator	Blue (reading success)	Red (reading failure)
Aiming Mode	Laser aiming	
Laser Safety Level	Class 2	
Host Screen	1.3 inch, 240*240 pixels, capacitive touch screen	
Communication Interface	Ethernet, Serial port	
Communication Protocols	Serial: RS232; Ethernet: TCP/IP, FTP, Profinet, Modbus TCP, EtherNet/IP	
Operating Voltage	20-28 VDC	
Power Consumption	Standby: 3.7W, Peak: 27W, Average: 6.7W	Standby: 4W, Peak: 23.7W
Number of Input Signals	3	
Effective Voltage of Input Signal	≤ 1.5V	
Number of Output Signals	3	
Output Signal Type	Voltage signal	
Output Load Capacity	Maximum 350mA@24VDC	
Housing Material	Aluminium alloy	
Weight	330g	500g
Dimensions (L*W*H)	112mm*60mm*53mm	131mm*106mm*58mm
Operating Temperature	0 ~ 55℃	
Storage Temperature	-20 ~ 70℃	
Relative Humidity	0~95% non-condensing	
ESD Protection	Air discharge: ± 18KV, Contact discharge: ± 8KV	
Vibration Resistance	10 to 55 Hz, dual amplitude 0.3mm, 1 hour in X, Y or Z directions	
IP Grade	IP65	
Certification	CE, RoHS, etc.	
Readable Code Symbolologies	All 1D, 2D and stacked barcodes in accordance with national and international standards	
Maximum Reading Accuracy	FV2X0N and FV2X0S 1D codes: 1.3mil; 2D codes: 2mil	

Reading distance and visual field

(Unit: mm)

Barcode specifications	FV220N/FV260N 6mm focal length lens		FV220S/FV260S 12mm focal length lens	
	Nearest	Farthest	Nearest	Farthest
5mil Code 128	30	621	40	750
6.67mil Code 128	25	763	40	820
10mil Code 128	28	1001	35	1230
15mil Code 128	32	1005	40	1400
5mil DataMatrix 10bit	25	128	40	207
6.67mil DataMatrix 10bit	25	194	40	354
10mil DataMatrix 10bit	25	275	40	543
15mil DataMatrix 10bit	25	490	40	751

Reading distance	FV220N/FV260N 6mm focal length lens		FV220S/FV260S 12mm focal length lens	
	X-axis field of view	Y-axis field of view	X-axis field of view	Y-axis field of view
50	45	25	28	15
100	90	50	45	27
300	250	140	132	73
500	415	230	208	115
800	680	370	338	187
1000	830	463	410	232

Standard model configuration table

FV220 Standard lighting model			
Model	Lens type	Light source type	Light source description
FV220N-1110	6mm (standard field of view) liquid lens	16pcs LED standard light source	Red, non-polarized light source
FV220S-1110	12mm (smaller field of view) liquid lens	16pcs LED standard light source	Red, non-polarized light source
FV260 Enhanced lighting model			
Model	Lens type	Light source type	Light source description
FV260N-1110	6mm (standard field of view) liquid lens	28pcs LED enhanced light source	Red, non-polarized light source
FV260N-1210	6mm (standard field of view) liquid lens	28pcs LED enhanced light source	Red, polarized light source
FV260S-1110	12mm (smaller field of view) liquid lens	28pcs LED enhanced light source	Red, non-polarized light source

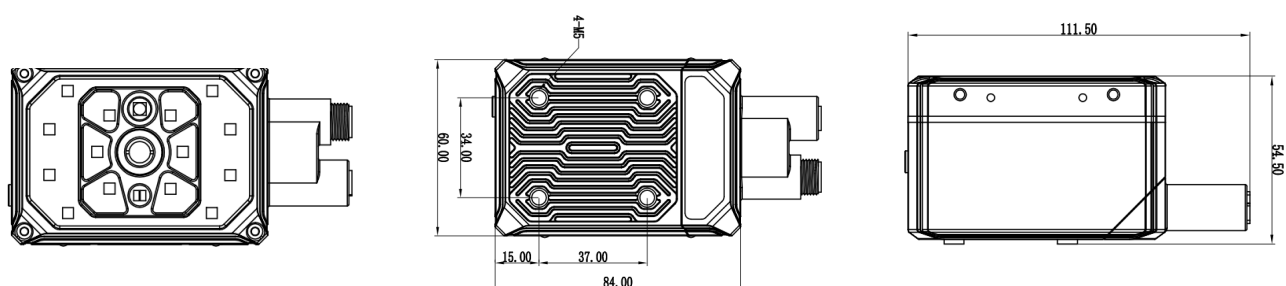
FV220 Special light source kit

Model	Description
FT20016PD	FV220 dedicated, semi polarized and semi atomized light source kit
FT20016PP	FV220 dedicated, fully polarized light source kit
FT20016DD	FV220 dedicated, fully atomized light source kit

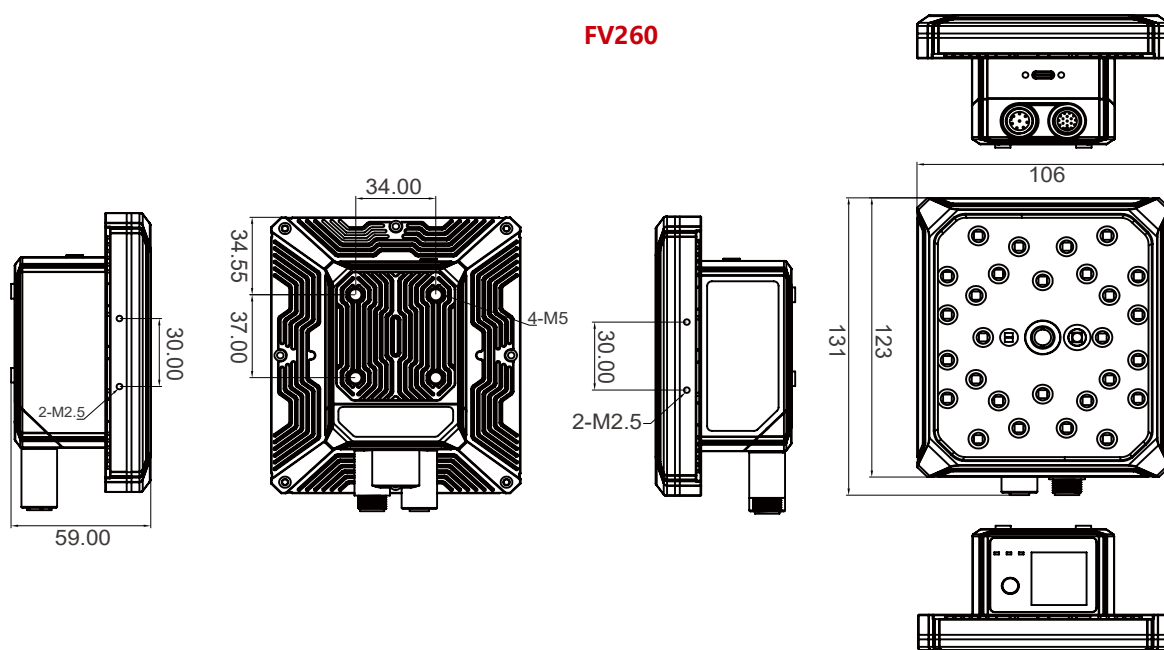
Dimensions

(Unit: mm)

FV220



FV260



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Ver:20230707