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Nanjing Bilin Intelligent Identification Technology Co., Ltd.

南京比邻智能识别技术有限公司
www.infoscan-cn.com

Nanjing Bilin Intelligent Identification Technology Co., Ltd.

Office: 25th Floor, No.2 Huangpu Road, Nanjing, China
Plant & Warehouse: Building B6, No.9 Bancang Street, Nanjing, China

86-400-700-6288

www.infoscan-cn.com

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BRAND INTRODUCTION

Nanjing Bilin lntelligent ldentification Technology Co., Ltd. (hereinafter referred to as "Bilin Intelligence") is a subsidiary of Nanjing Golden dongkang Information System Co., Ltd., which is a leading enterprise in China that has been focusing on the automatic identification industry for 30 years. Bilin Intelligence is a high-tech enterprises in the R&D and production of IoT data collection products such as automatic recognition, machine vision and intelligent sensing terminal, etc.

The first industrial barcode reader of Bilin Intelligence was born in 2009, taking the lead in breaking the long-term monopoly of foreign products in this field.

By the end of 2022, more than 200,000 units of infoscan industrial barcode reading devices have been installed in 3C/New energy/Automobile/Medical equipment and other manufacturing application fields.

CLIENTS

Goertek

Quanta Computer

Wistron
Innovation · Integrity
创新 · 诚信

FAI 臻鼎科技集團
Zhen Ding Tech. Group

FOXCONN
富士康科技集团

GREE 格力

AOC
冠捷显示器

KHB
科华生物

CATL 宁德时代

BYD
比亚迪汽车

JinKO Solar

JA SOLAR
晶澳太阳能

DEVELOPMENT HISTORY

2009–2023

2009
In 2009, Bilin Intelligence officially launched its first industrial fixed-mount barcode reader FS32

2011
In 2011, Registered the trademark "infoscan"

2012
In 2012, infoscan family's classic barcode reader FS36 was launched

2016
In 2016, Bilin Intelligent Identification Technology Co., Ltd. was officially established and became a subsidiary of Golden dong Kang

2017
In 2017, FV300N series readers were launched (the FV series high-performance barcode scanners were officially launched)

2018
In 2018, FV100 series barcode readers were launched (the first reader to use a liquid zoom lens)

2022
In 2022, FV6X series readers were launched (using innovative designs such as magnetic levitation lenses and combined illuminant)

2023
In 2023, FV200 series readers were launched (the first barcode reader with touch screen)

FV High-performance Fixed-mount Series

FV3X Series
Compact Industrial Reader

Product Features

Compact structure
Suitable for equipment integration

Dimensions:
40mmX37.4mmX26.8mm

Support common communication modesSuitable for most equipment integration requirements

The product unit includes: Serial port/USB (simulation keyboard, simulation serial port) Interface that automatically adapts to cable switching

Megapixel combines with excellent lighting

1280*800 pixel CMOS
Unique polarized lighting providing

Excellent DPM 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

Applications

Medical testing equipment code reading integration

Test instrument code reading integration

Self-service terminals code reading integration

Code printing support

Reading Distance And Visual Field

Unit（mm）

Code density /system	FV31		FV31L	
	Nearest	Farthest	Nearest	Farthest
3.34mil Code 128	50	110	60	110
5mil Code 128	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 10bit	40	110	70	110
6.67mil DataMatrix 10bit	40	120	60	110
10mil DataMatrix 10bit	40	150	50	130
15mil DataMatrix 10bit	40	160	50	150

| Reading distance	FV31		FV31L	
	X-axis field of view	Y-axis field of view	X-axis field of view	Y-axis field of view
50	40	30	30	20
100	90	60	70	40
150	130	80	100	60
200	170	110	130	80

Technical Specifications

Sensor	1/4 inch CMOS, global shutter
Image Resolution	1280X800
Frame Rate	72 frame/s
Trigger Mode	Command trigger; I/O trigger; Continuous reading mode; Key trigger
I/O Type	1 input; 2 outputs
LED	3 LED indicator lights (power, reading success, reading failure)
Illumination	Body light source: 2 bright red LED beads Auxiliary light sources: 4 LED beads, white/red optional, polarized/non-polarized optional
Focusing Mode	Fixed focus
Focal Length	FV31: 4.2mm FV31L/FV32: 6mm
Field Angle	FV31: 48°（horizontal） FV31L/FV32: 34°（horizontal）
Reading Accuracy	FV31/FV31L:1D code 3mil /2D code 5mil FV32:1D code 2mil /2D code 3mil
Aiming Mode	Laser cross aiming
Communication Modes	RS232、USB (simulation serial port、simulation keyboard port)
Power Supply	Serial port: 5VDC; USB power supply
Power Consumption	1.2W (Standby status) ,1.75w (average) ,2W (Peak)
Case Material	Aluminum alloy
Weight	38 g
Dimensions	40mmx37.4mmx26.8mm (L X W X H)
Operating Temperature	-10 ~ 50 ℃
Storage Temperature	-20 ~ 65 ℃
IP Grade	IP54
Certification	CE、RoHS
Vibration Resistance	10 to 55 Hz: double amplitude 2.5 mm / 3 hours in X, y and Z directions
Electro Magnetic Compatibility	EN55032:2015，EN55024:2010
Supported code systems and characters	Readable 1D, 2D and stacking codes in accordance with national and international standards

Standard Model Configuration Table

● REC

Model	Specific description
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, standard angle of view, high accuracy
FV32-2100	1280 * 800 pixels, white LED light source, standard light, standard angle of view, high accuracy
FV32-2200	1280 * 800 pixels, white LED light source, polarized light, standard viewing angle, high accuracy

Dimensions

Unit（mm）

40.08 26.87 24.08 2-M3 37.44 15.83 28.00
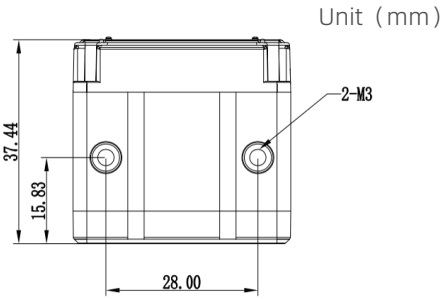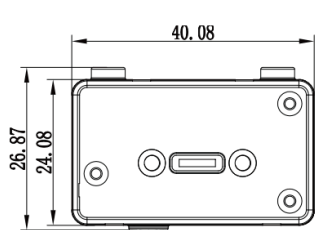
FV61/FV63L Series
Compact Industrial Barcode Scanner

infoscan FV61/63L series adopt rich light source combination and various lens configurations as well as built-in image processing and DPM algorithm with excellent DPM codereading ability and good dynamic code reading performance. It is an appropriate choice for various applications of industrial manufacturing.

Product Features

Code reading performance is excellent

Built-in rich image processing technology enables quickly decoding of paper/engraving/spray code and other barcodes, even the slightly stained or distorted barcodes. Fully suitable for various applications.

Industrial grade design

The design of IP65/aviation connector/anti-drag cable can adapt to harsh working environment.
Compatible with mainstream communication mode and industrial bus protocol, convenient for supporting integrated communication with industrial automation equipment.

Automatic optical focusing (FV63L)

Micro-drive technology is used to achieve automatic optical focusing at different reading distances, so the installation position is no longer a problem.

Powerful optical config

In this compact device, a variety of lighting combinations are built-in, which can provide the best lighting scheme for different coding modes.

Applications

Automated production line integration

Laser/spray code and other code matching

Robot

Integration of test instruments

Automation equipment integration

Reading Distance And Visual Field

Unit（mm）

Density /Code system	FV61Series (focal distance4mm)		FV63LSeries (focal distance6mm)	
	Nearest	Farthest	Nearest	Farthest
3.34mil Code 128	45	122	45	160
5mil Code 128	40	170	40	240
6.67mil Code 128	28	220	40	330
10mil Code 128	28	260	35	490
15mil Code 128	35	339	45	730
20mil Code 128	45	430	55	930
3.34mil DataMatrix 10bit	NA	NA	60	100
5mil DataMatrix 10bit	57	85	50	105
6.67mil DataMatrix 10bit	40	115	43	170
10mil DataMatrix 10bit	32	188	40	255
15mil DataMatrix 10bit	30	230	35	375
20mil DataMatrix 10bit	30	312	40	480

| Reading distance	FV61Series (focal distance4mm)		FV63LSeries focal distance6mm	
	X-axis field of view	Y-axis field of view	X-axis field of view	Y-axis field of view
50	43	27	31	22
100	91	57	66	42
150	128	81	99	63
200	174	110	133	82
300	251	163	203	128

Technical Specifications

Sensor type	1/4 inch CMOS sensor, global shutter
Sensor resolution	1280x800
Acquisition speed	Up to 72 FPS
Trigger mode	Command trigger; I/O trigger; Continuous reading mode; Key trigger
I/O type	2 inputs; 2 outputs
LED indicator	4 LED indicators (power, reading success, reading failure, etc.)
Illumination source	Combined light source/polarized light source/highlight light source; white/red LED light source
Focus mode	FV61: Fixed focus, FV63L: Autofocus
Lens focal length	FV61 : 4mm , FV63L : 6 mm
Viewing angle	FV61: 48 (horizontal), FV63L: 34 (horizontal)
Aiming mode	Laser aiming
Laser safety level	Class2
Communication interface	Ethernet, RS232, USB (simulated serial port, simulated keyboard）（Note 1)
communication protocol	RS232, TCP/IP , Profinet, Modbus TCP, EtherNet/IP
Operating voltage	5VDC/24VDC
Power consumption	2.5W（standby）；11.5W（peak）；4W (average) (Note 2)
Shell material	Aluminum alloy
Weight	130 g
Product size	57mmx42mmx28.5mm (L x W x H)
Operating temperature	-10 ~ 50 ℃
Storage temperature	-20 ~ 70 ℃
IP rating	IP65
Certification	CE、RoHS
Supported code systems and characters	Readable 1D, 2D and stacking codes in accordance with national and international standards
Highest reading accuracy	1D bar code: 1.8 mil / 2D bar code: 3 mil (FV63L series)

Note 1: USB communication mode can be achieved in specified model and with 5VDC power supply;
Note 2: The value are measured when the operating voltage is 24VDC and without external load.

Standard Model Configuration Table

●REC

	Model	Specific description
FV61	FV61-2100	1280*800 pixel\ white bright light\ fixed-focus\ standard field of view\ serial port+ethernet
	FV61-2210	1280*800 pixel\ red polarized light\ fixed-focus\ standard field of view\ serial port+ethernet
	FV61-2200	1280*800 pixel\ white polarized light\ fixed-focus\ standard field of view\ serial port+ethernet
	FV61-2310	1280*800 pixel\ red combined light\ fixed-focus\ standard field of view\ serial port+ethernet
	FV61-2300	1280*800 pixel\ white combined light\ fixed-focus\ standard field of view\ serial port+ethernet
	FV61(U)-2210	1280*800 pixel\ red polarized light\ fixed-focus\ standard field of view\ USB+ethernet\ 5V power supply
	FV61(U)-2310	1280*800 pixel\ red combined light\ fixed-focus\ standard field of view\ USB+ethernet\5V power supply
	FV61(U)-2300	1280*800 pixel\ white combined light\ fixed-focus\ standard field of view\ USB+ethernet\ 5V power supply
FV63L	FV63L-2110	1280*800 pixel\ red bright light\ auto-focus\ narrow field of view\ serial port+ethernet
	FV63L-2100	1280*800 pixel\ white bright light\ auto-focus\ narrow field of view\ serial port+ethernet
	FV63L-2210	1280*800 pixel\ red polarized light\ fixed-focus\ narrow field of view\ serial port+ethernet
	FV63L-2200	1280*800 pixel\ white polarized light\ fixed-focus\ narrow field of view\ serial port+ethernet
	FV63L-2310	1280*800 pixel\ red combined light\ auto-focus\ narrow field of view\ serial port+ethernet
	FV63L-2300	1280*800 pixel\ white combined light\ auto-focus\ narrow field of view\ serial port+ethernet
	FV63L(U)-2210	1280*800 pixel\ red polarized light\ auto-focus\ narrow field of view\ USB+ethernet\ 5V power supply
	FV63L(U)-2200	1280*800 pixel\ white polarized light\ auto-focus\ narrow field of view\ USB+ethernet\ 5V power supply
	FV63L(U)-2310	1280*800 pixel\ red combined light\ auto-focus\ narrow field of view\ USB+ethernet\ 5V power supply
	FV63L(U)-2300	1280*800 pixel\ white combined light\ auto-focus\ narrow field of view\ USB+ethernet\ 5V power supply

Dimensions
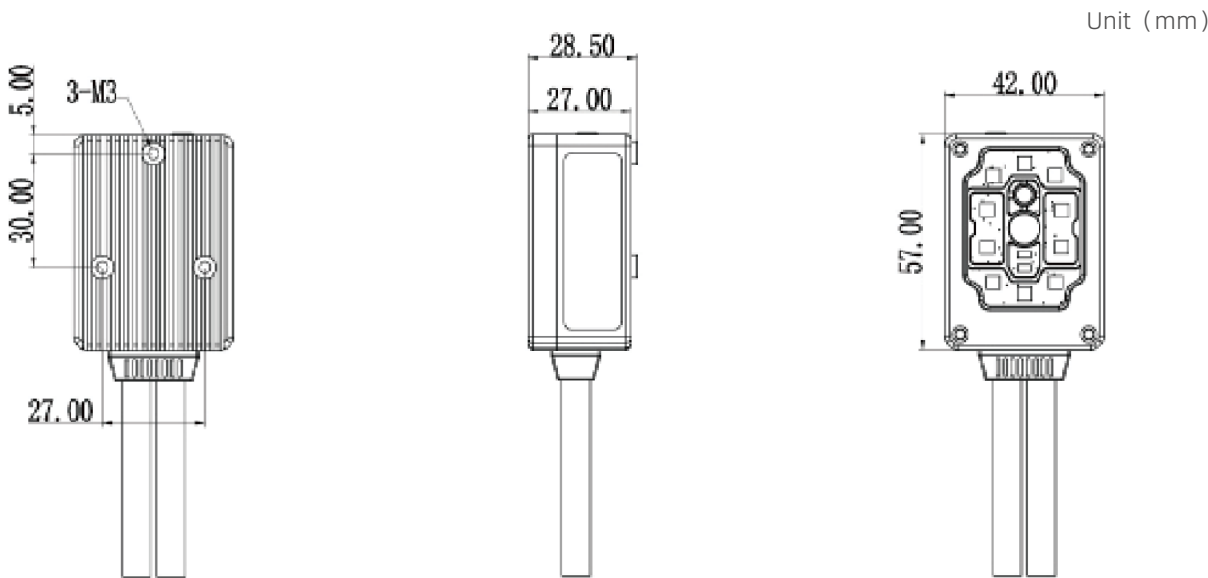
Unit（mm）

28.50
27.00
3-M3
5.00
30.00
27.00

42.00
57.00

FV104 Series
Industrial Fixed-mount Barcode Scanner

FV104 is a professional industrial barcode reader that supports manual focusing. It uses a high-performance 1.2 megapixel CMOS sensor, equipped with rich lighting units and excellent image processing and decoding algorithms. It can easily handle various application scenarios such as DPM code reading, assembly line collection, and multibarcode collection. FV104 is also with a rotatable pedestal, which makes it easier to be installed in a narrow space.

Product Features

Excellent DPM decoding performance

1.2 megapixel low noise CMOS, improving imaging quality. Provide multiple light sources: bright/polarized/atomized. Built-in rich image processing algorithms and DPM higher-order algorithms.

Manual focusing lens

Adopting manual focusing method, an economical and practical focusing solution. Lens with larger viewing angle, suitable for medium to close distance reading scenarios.

Good dynamic reading performance

High performance CMOS, providing a collection rate of 60 frames per second.
Combination of lens and light source, ensures the lighting requirements for dynamic collection.
Provide enhanced decoding mode for more efficient shooting and decoding.

Industrial grade product design for better versatility

 2+4 I/O configuration, graphical custom interface, suitable for complex signal and data interaction.
Supports multiple industrial Ethernet protocols to cope with mainstream PLC communication integration.
Rich software functions such as one-click automatic parameters adjustment, multiple sets of exposure polling and 10 sets built-in configurations.

Applications

Product traceability	Laser/ink-jet coding matching	Device integration
Automobile manufacturing	Photovoltaic industry	Electronic manufacturing

Reading Distance And Visual Field

Unit（mm）

Barcode specifications	Nearest	Farthest
3.34mil Code 128	23	285
5mil Code 128	20	425
6.67mil Code 128	20	570
10mil Code 128	25	700
15mil Code 128	40	905
5mil DataMatrix	25	110
6.67mil DataMatrix	25	160
10mil DataMatrix	25	240
15mil DataMatrix	35	385

Reading distance	X-axis field of view	Y-axis field of view
50	33	24
100	65	48
150	95	70
200	130	95
300	189	108
400	250	187

Technical Specifications

Sensor	CMOS sensor, global shutter
Image Resolution	1280×960
Frame Rate	Maximum 60 frame/s
Lens Type	Manual focusing
Focal Length	7.5mm
Angle of View	36° (horizontal), 27° (vertical)
Roll/ Pitch/ Yaw	360° (roll)/ 65° (pitch)/ 65° (yaw)
Triggering Mode	Command triggering; I/O triggering; continuous reading mode; key triggering, etc.
LED Indicator	4 LED indicators (power, reading success, reading failure, automatic parameter adjustment)
Illumination Type	12 LED beads that can be controlled in groups, combined light source/ polarized light source/ high brightness light source, etc.
Illumination Color	White/ red/ blue LED light source available
Aiming Mode	Laser cross aiming
Laser Safety Level	Class 2
Communication Interface	Ethernet, serial port
Communication Protocol	Ethernet: TCP/IP, FTP, Profinet, Modbus TCP, EtherNet/IP, Serial port: RS232
Power Supply	20-30VDC
Power Consumption	1.9W (Standby status), 14.4W (Peak)
Number of Input Signals	2个
Effective Voltage of Input Signal	l ≤ 1.5VDC
Number of Output Signals	4
Output Signals Type	Voltage signal
Output Load Capacity	Maximum 350mA@24VDC (total)
Case Material	Aluminum alloy

Weight	192.8g (excluding cables)
Dimensions	86mm×51mm×37.6mm (L×W×H)
Operating Temperature	-10℃ ~ 50℃
Storage Temperature	-20℃ ~ 70℃
Relative Humidity	5% ~ 95% RH non-condensing
Ambient Light Immunity	0 ~ 100,000Lux
Vibration Resistance	10 ~ 50 Hz, double amplitude 0.3mm, one hour in x, y or z direction
IP Grade	IP65
Explosion Proof Grade (specified model)	Exib IIA T4 Gb
Certification	CE、RoHS
Readable Symbologies	1D, 2D and stack codes that meet national and international standards
Maximum Reading Accuracy	1D code: 1.6 mil，2D code: 2 mil

Standard Model Configuration Table

● REC

FV104 series Liquid focusing models

Model	Description
FV104-1110	1.2 million pixels, 7.5mm manual focusing, red LED highlight light source
FV104-1100	1.2 million pixels, 7.5mm manual focusing, white LED highlight light source
FV104-1130	1.2 million pixels, 7.5mm manual focusing, blue LED highlight light source
FV104-1210	1.2 million pixels, 7.5mm manual focusing, red LED polarized light source
FV104-1200	1.2 million pixels, 7.5mm manual focusing, white LED polarized light source

Dimensions

51.0
66.0
89.0
20.0
1.5 36.1
33.0
4-M5
36.0

Unit（mm）
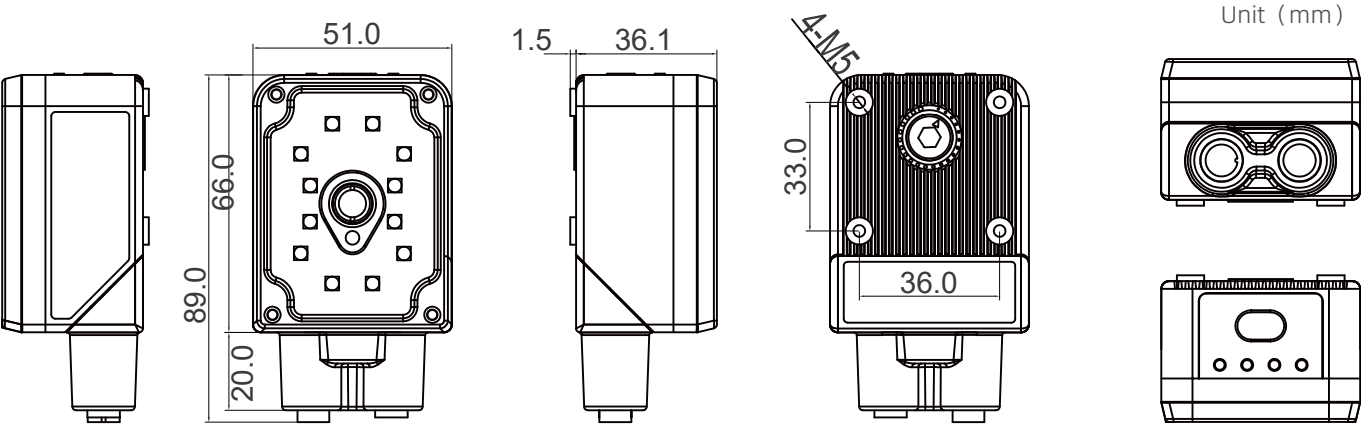
FV105 Series
Industrial Fixed-mount Barcode Scanner

FV105 is an industrial grade barcode reader that supports autofocus with superior performance. It has 1.2 megapixel high performance CMOS sensor, multiple lighting units with powerful image processing and decoding algorithm. In the face of challenging application scenarios such as high-speed and high-frequency reading, high-density barcode reading and DPM barcode reading, FV105 can provide users with fluent reading and operation experiences.

Product Features

Excellent DPM decoding performance

1.2 megapixel low noise CMOS, improving imaging quality.
Provide multiple light sources: highlight/ polarized/ atomized.
Built-in rich image processing algorithms and DPM higher-order algorithms.

Provide models with liquid lens of multiple specifications

Multiple lens configurations including 6mm/12mm/16mm are available.
long-term use of liquid lenses, accumulated rich experience in applications

Good dynamic reading performance

High performance CMOS, providing a collection rate of 60 frames per second.
The combination of lens and light source, ensures the lighting requirements during high-speed movement.
Provide enhanced decoding mode for more efficient shooting and decoding

Industrial grade product design, better versatility

2+4 I/O configuration, graphical custom interface, suitable for complex signal and data interaction.
Supports multiple industrial Ethernet protocols to cope with mainstream PLC communication integration.
Rich software functions such as one-click automatic parameters adjustment, multiple sets of exposure polling and 10 sets built-in configurations.

Applications

Product traceability

Laser/ink-jet coding matching

Device integration

Automobile manufacturing

Photovoltaic industry

Electronic manufacturing

Reading Distance And Visual Field

Unit（mm）

Barcode specifications	Nearest	Farthest
3.34mil Code 128	45	340
5mil Code 128	45	585
6.67mil Code 128	45	720
10mil Code 128	52	>1090
15mil Code 128	90	>1090
5mil DataMatrix	45	150
6.67mil DataMatrix	45	220
10mil DataMatrix	45	385
15mil DataMatrix	45	510

Reading distance	X-axis field of view	Y-axis field of view
50	24	17
100	44	32
150	61	46
200	85	63
300	118	89
500	210	155
1000	415	310

Technical Specifications

Sensor	CMOS sensor, global shutter
Image Resolution	1280×960
Frame Rate	Maximum 60 frame/s
Lens Type	Liquid Lens，Auto-focus
Focal Length	6mm/12mm/16mm
Angle of View	25° (horizontal), 18° (vertical) (data from 12mm lens)
Roll/ Pitch/ Yaw	360° (roll)/ 65° (pitch)/ 65° (yaw)
Trigger Mode	Command trigger; I/O trigger; continuous reading mode; key trigger, etc
LED Indicator	4 LED indicator lights (power, reading success, reading failure, automatic parameter adjustment)
Illumination Type	12 LED beads that can be controlled in groups, combined light source/ polarized light source/ high brightness light source, etc.
Illumination Colour	White/ red/ blue LED light source available
Aiming Mode	Laser cross aiming
Laser Safety Level	Class 2
Communication Interface	Ethernet, serial port
Communication Protocol	Ethernet: TCP/IP, FTP, Profinet, Modbus TCP, EtherNet/IP; Serial port: RS232
Power Supply	20-30VDC
Power Consumption	1.9 W (Standby status); 14.4W (Peak)
Number of Input Signals	2
Effective Voltage of Input Signal	≤ 1.5VDC
Number of Output Signals	4
Output Signals Type	Voltage signal
Output Load Capacity	Maximum 350mA@24VDC (total)
Case Material	Aluminum alloy
Weight	194.3g (excluding cables)

|	
Dimensions	86mm×51mm×37.6mm (L × W × H)
Operating Temperature	-10℃ ~ 50℃
Storage Temperature	-20℃ ~ 70℃
Relative Humidity	5% - 95% RH non-condensing
Ambient Light Immunity	0 ~ 100,000Lux
Vibration Resistance	10 - 50 Hz, double amplitude 0.3mm, one hour in x, y or z direction
IP Grade	IP65
Explosion Proof Grade (specified model)	Exib IIA T4 Gb
Certification	CE、RoHS
Readable Symbologies	1D, 2D and stack codes that meet national and international standards
Maximum Reading Accuracy	1D code: 1.6 mil，2D code: 2 mil

Standard Model Configuration Table

●REC   FV105 series liquid focusing models

Mode	Description
FV105-1110	1.2 million pixels, 12mm liquid lens, red LED highlight light source
FV105-1100	1.2 million pixels, 12mm liquid lens, white LED highlight light source
FV105-1130	1.2 million pixels, 12mm liquid lens, blue LED highlight light source
FV105-1210	1.2 million pixels, 12mm liquid lens, red LED polarized light source
FV105-1200	1.2 million pixels, 12mm liquid lens, white LED polarized light source
FV105-1610	1.2 million pixels, 12mm liquid lens, red LED atomized light source
FV105-1600	1.2 million pixels, 12mm liquid lens, white LED atomized light source

Dimensions

Unit（mm）

51.0　37.6　36.1　86.0　7.0　36.0　4-M5　33.0　51.0　66.0　56.1　37.6
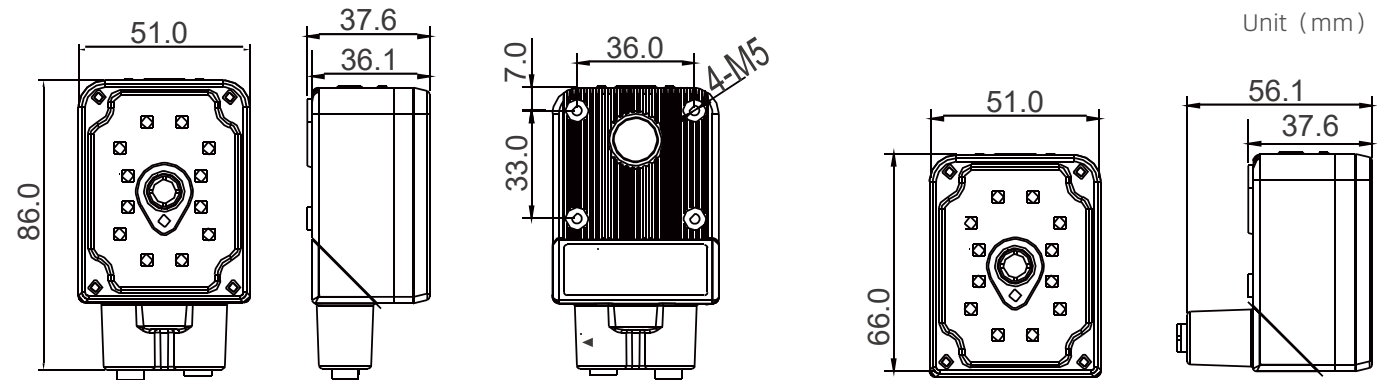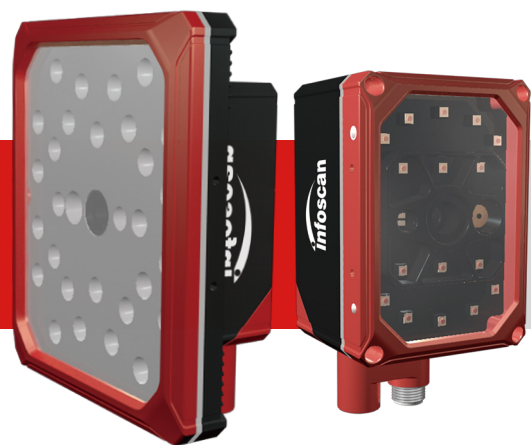
FV2X0 Series
Industrial Fixed-mount Barcode Scanner

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%

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

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 highspeed moving barcodes

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

Applications

Large view field	Multiple barcodes reading	Wide angle reading

Long-distance reading	High-speed assembly line collection

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

Technical Specifications

Model number	FV220 series	FV260 series
Sensor	1/3 inch CMOS sensor, global shutter	
Image Resolution	1920x1080	
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 sourcehigh brightness/polarization
Lighting Source Color	Red	
Light Source Kits	Polarized/Atomized/Polarized+Atomized	NA
Reading Area Indicator	Blue (reading success) Red (reading)	
Aiming Mode	Laser aiming	
Laser Safety Level	Class 2	
Host Screen	1.3 inch, 240*240 pixels, capacitive touch	
Communication Interface	Ethernet, Serial port	
Communication Protocols	Serial: RS232; Ethernet: TCP/IP, FTP, Profinet, Modbus TCP, EtherNet/IP	
Operating Voltage	20-28VDC	

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)	112mmx60mmx53mm	131mmx106mmx58mm
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 Symbologies	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	

Standard Model Configuration Table

●REC 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

●REC 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

●REC 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

FV220 Dimensions Unit（mm）
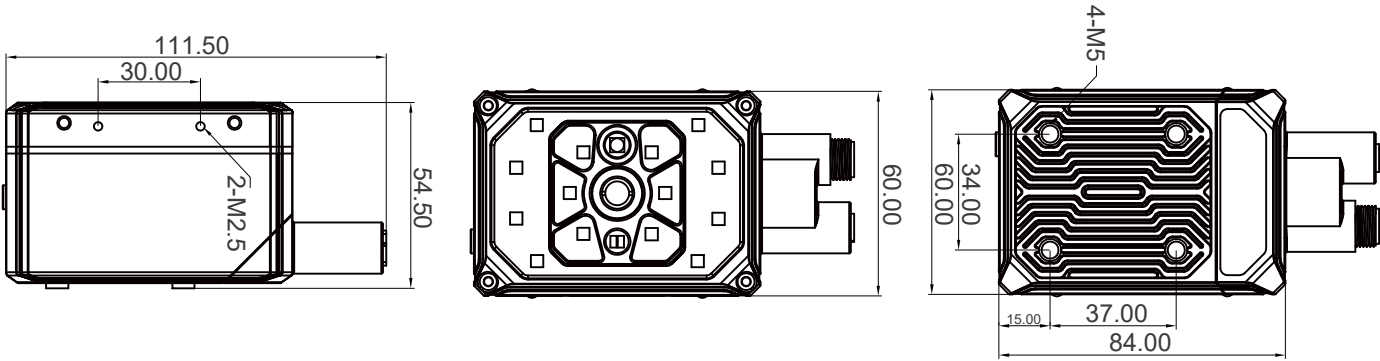
FV260 Dimensions Unit（mm）
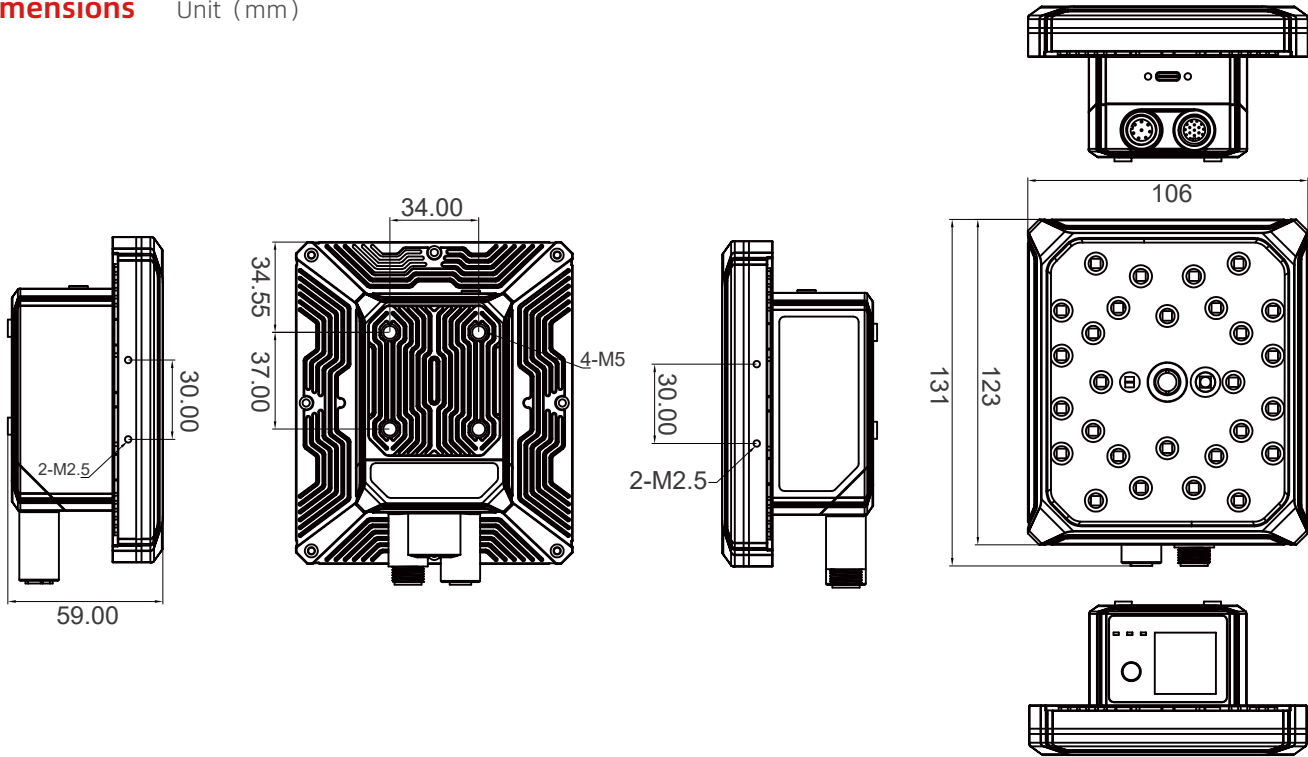
HS Handheld Series

HS3050
Handheld 2D Code Reader

HS3050 series handheld two-dimensional barcode reader adopts high-performance reading components, providing good reading fluency, strong applicability for screen barcodes and stained barcodes reading. The product adopts IP54 protection level design, ensuring durable and reliable performance.

Product Features

Excellent reliability

IP54 protection level design with reliable performance

Good reading performance

Commonly used 1D and 2D barcodes are readable; Label barcodes and screen barcodes can be read smoothly

Universal communication interface

Support USB keyboard, USB simulated Serial port and RS232 communication

Reading Data Parameters

Unit（mm）

Code System /Density	Typical Range
3 mil Code 128 15 bit	35 mm – 100 mm
10 mil Code 128 15 bit	50 mm – 265 mm
10 mil Code 39 10bit	70 mm – 275 mm
5 mil DM 15 bit	35 mm – 75 mm
15 mil DM 15 bit	25 mm – 225 mm
15 mil QR 15 bit	15 mm – 180 mm
20 mil QR 15 bit	20 mm – 230 mm

Technical Specifications

Dimensions	160mmx70mmx107mm
Body Weight	133g
Power Supply	4.75-5.25 VDC
Operating Current	360 mA
Standby Current	140 mA
Communication Interface	USB keyboard ,USB simulation serial, RS232
Operating Temperature	-20℃ ~ 60℃
Storage Temperature	-30℃ ~ 70℃
Relative Humidity	5% to 95%(non- condensing)
IP Grade	IP54
Ambient Light	0 ~ 100000lux
Shake Resistance	2000 G, 0.7 ms, 3 axis
Drop Resistance	withstand 1.2 meters falling to the cement ground
Image Type	Area image (640 x 480)
Illumination	Visible white light
Aiming light source	Visible red light
Motion Tolerance	100 cm/s
Scanning Angle	45°(Horizontal), 30° (Vertical)
Reading Symbologies	Standard 1D codes, stack codes and 2D codes
Maximum Reading Accuracy	1D code: 3mil (0.076mm); 2D code: 5mil (0.127mm)

HS3260
Industrial Handheld Reader

HS3260 is an industrial wired handheld barcode scanner launched by brand "infoscan". Using megapixel sensor, efficient processors and well-designed lighting units. HS3260 series can instantly read printed barcodes, radium carved codes and common DPM barcodes, with IP65 protection grade design, vibrating prompt, 1.8m drop resistance, which fully meets harsh work environments.

Product Features

Excellent barcode reading performance

Megapixel CMOS sensor with excellent image and decoding algorithm, greatly improves reading fluency and reading depth of field. Meet various reading scenarios such as label bar code, radium carving bar code and dot matrix bar code, etc.

Diverse feedback prompts

Simultaneously equipped with LED light prompts, buzzer sound prompts and vibration sensing prompts. Ensure timely and accurate code reading feedback in noisy environment.

Universal communication interface

Supports USB keyboard, USB simulation serial port and RS232 communication.

Industrial grade design for demanding environments

Adopts IP65 protection grade design, which can withstand more than 30 times impact of 1.8m falling to cement ground. The product is strong and durable, which minimizes the failure occuring.

Applications

Home appliances manufacturing	Electronics manufacturing	Automobile manufacturing	Transportation	Food and drug traceability

Reading Range

Unit（mm）

Barcode Spec	Nearest	Farthest
3.34mil Code 128	35	130
5mil Code 128	23	165
10mil Code 128	5	250
15mil Code 128	10	345
5mil DataMatrix	45	85
6.67mil DataMatrix	35	130
10mil DataMatrix	25	180
15mil DataMatrix	20	220

Technical Specifications

|	
Sensor type	1/4 inch CMOS sensor
Image resolution	1280x800
Illumination	2 red light beads for internal lighting, 4 red light beads for external auxiliary lighting
Aiming mode	Laser aiming
Minimum printing contrast	20%
Motion tolerance	100 cm/s
Viewing angle	34° (horizontal), 21.25° (vertical)
Roll/Pitch/Yaw	360° (roll), 60° (pitch), 55° (yaw)
Reading symbologies	1D, 2D and stacked codes that comply with national and inter- national standards
Maximum reading accuracy	1D code: 3 mil 2D code: 5 mil
Dimensions (L x W x H)	199mmx77mmx94mm
Weight	261g (Cable not included)
Operating voltage	4.75 ~ 5.25 VDC
Operating current	380 mA
Standby current	140 mA
Communication interface	USB keyboard, USB simulated serial port, RS232
Indicating way	LED indication, buzzer indication and vibration indication
Operating temperature	-10° C ~ 45° C
Storage temperature	-30° C ~ 60° C
Relative humidity	5% ~ 95% (non- condensing)
Ambient light immunity	0 ~ 100,000 Lux
ESD protection	±20KV air discharge, ±10KV direct discharge
IP Grade	IP65
Drop resistance	1.8m falling to the cement ground (30 times)
Certification	CE、RoHS

Standard Model Configuration Table

● REC　　HS3260

Unit mode	Descriptions
HS3260-10-U-02A	Wired, handheld, red LED, USB set
HS3260-10-R-02B	Wired, handheld, red LED, Serial port set, cable of 2 meters, 5V 2A power supply

Dimensions

Unit（mm）

77　94

199
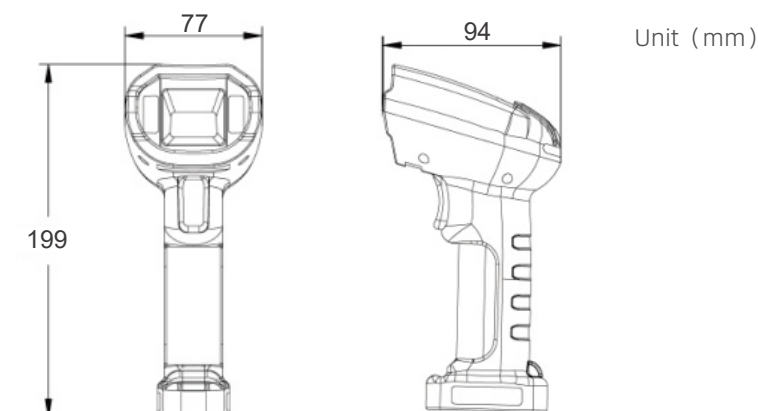
HS3155
Wireless Handheld Reader

HS3155 is a lightweight handheld wireless Bluetooth barcode reader, equipped with a megapixel sensor and efficient processor. HS3155 can quickly read label barcodes, screen barcodes and good DPM barcodes. The new generation of Bluetooth wireless technology enables transmission distances of over 80m, the combination of 2500mAh battery capacity and optimized power saving mode ensures good battery endurance of the device.

Product Features

Meet universal barcode reading scenarios

Reading accuracy can reach 3mil 1D and 5mil 2D
Easily read label barcodes and screen barcodes
Can read good-quality DPM barcodes such as
laser engraving codes and spray codes

Good battery endurance

Battery capacity: 2500mAh
Optimized power saving mode, with continuous operating time of over 9 hours

Humanized structural design

Lightweight exterior design for easy hold
Horizontal communication base design, ensuring stable placement and easy use

Excellent wireless transmission perfor- mance

Adopting next-generation Bluetooth transmission technology
Wireless communication transmission distance can reach 80m (in open scenarios)
Communication disconnection prompt and data storage function

Applications

Home appliances manufacturing	Electronics manufacturing	Warehouse inventory	Logistic transportation	Food and drug traceability

Technical Specifications

Sensor	CMOS sensor
Image resolution	1280x1024
Illumination Source	White LED
Aiming Light Source	Red LED
Angle of View	44° (horizontal), 34° (vertical)
Roll/ Pitch/ Yaw	360° (roll)/ 65° (pitch)/ 65° (yaw)
Print Contrast	20% minimum reflection difference
Communication Mode	USB simulated keyboard, USB simulated serial port
Maximum Reading Accuracy	1D code: 3 mil, 2D code: 5 mil
One-dimensional Barcode (1D code)	Codabar, Code 11, Code 39, Code 93, Code 128/EAN128, EAN.UCC Composite,Interleaved 2 of 5,MSI Code, Planet, Plessey Code, Postnet, RSS, Standard 2 of 5, Telepen, UPC/EAN, etc.
Two-dimensional Barcode (2D code)	PDF417, QR code, Matrix 2 of 5, MicroPDF417, Australian Post, Canada Post, Japan Post, MaxiCode, Codablock, Aztec, Dutch Post, TLC 39,DataMatrix, etc.

Dimensions (L x W x H)	Reader: 160mmx69mmx108mm；Communication base： 201mmx94mmx102mm
Weight	Reader: 200g / Base: 165g
Base Power Supply	USB/5VDC±10%
Standby Current	165mA
Operating Current	Max: 300mA
Indicating Way	LED indicator, Buzzer indication
Operating Temperature	0℃ ~ 45℃
Storage Temperature	-10℃ ~ 50℃
Relative Humidity	5% ~ 95% RH non-condensing
Ambient Light Immunity	0 ~ 100,000 Lux
Drop Resistance	withstand a drop of 1.2 meters to the cement floor (30 times)
ESD Protection	±8KV indirect coupling surface，±15KV direct air discharge
Wireless Trans- mission Mode	Bluetooth
Wireless Signal	2.4-2.5 GHz bandwidth range
Communica- tion Distance	Indoor : 20 meters, open: 80 meters
Transmission Mode	Real time transmission / batch storage
Storage Capacity	20,000 pcs (13bit/ pc)
Battery Capacity	3.7V/ 2500mAh
Battery Endurance	Above 9 hours (triggered every 2 seconds, decoding over 16000 times in average)
Charging Time	6 hours

Reading Range

Unit（mm）

Barcode specifications	Nearest	Farthest
3.34mil Code 128	39	126
5mil Code 128	28	168
10mil Code 128	13	258
15mil Code 128	12	284
5mil DataMatrix 10bit	40	95
6.67mil DataMatrix 10bit	30	140
10mil DataMatrix 10bit	20	200
15mil DataMatrix 10bit	20	230

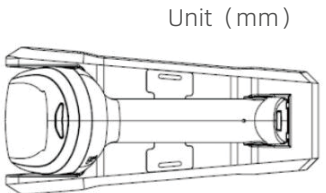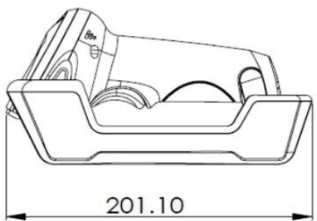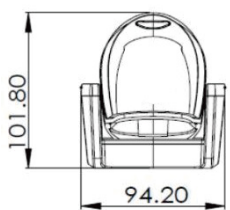## Standard Model Configuration Table

● REC   HS3155

Model	Descriptions
HS3155-02-U-02A	Wireless handheld model, white LED, USB set, cable of 2 meters
HS3155-02-U-02B	Wireless handheld model, white LED, USB set, cable of 2 meters, 5V power supply

Dimensions

Unit（mm）

101.80

94.20

201.10

HS3660

Handheld Wired Industrial DPM Reader

HS3660 is an industrial wired handheld barcode reader with superior performance for various DPM (Direct Part Mark) barcodes reading occasions. HS3660 adopts multi-color intelligent switching Area Light Source, professional image processing and DPM decoding algorithm and industrial grade protection design. It can be used for diverse DPM code reading applications such as reflective, stained, low contrast, small-sized and punching code reading, in the field of automotive components, metal manufacturing industries.

Product Features

Powerful DPM decoding capability

Applicable for challenging DPM barcodes such as reflections, stains, low contrast and small sizes;Can be widely used in various DPM code reading applications such as automotive metal components, chip packaging and home appliance assembly, etc.

Multiple color intelligent switching illumination

Provide white point illumination, red and blue area illumination to handle barcodes on various materials and surfaces (such as reflective, different colors, metals, curved surfaces, etc.), automatically switch and match the best illumination scheme

Diverse feedback prompts

Simultaneously equipped with LED light prompts, buzzer prompts and vibration prompts, ensuring timely and accurate code reading feedback in noisy and applicable environments

Industrial grade design that meets harsh environments

The body adopts IP67 protection rate
Withstand multiple impacts of 1.2 meter drop to cement ground
Sturdy and durable, minimizing failure rates and adapting to harsh industrial scenarios

Applications

| Home appliances manufacturing | Electronics manufacturing | Automobile manufacturing | Aerospace manufacturing | Photovoltaic industry |

Reading Distance

Unit（mm）

Reading Distance	Nearest	Farthest
3.34mil Code 128	5	73
5mil Code 128	5	82
10mil Code 128	5	121
15mil Code 128	5	150
5mil DataMatrix	5	51
6.67mil DataMatrix	5	72
10mil DataMatrix	5	93
15mil DataMatrix	5	111

Reading Distance And Visual Field

|	
Sensor Type	CMOS sensor
Image Resolution	1280x1024
Acquisition Speed	Up to 60 frames per second
Viewing Angle	44° (Horizontal), 34° (Vertical)
Roll/ Pitch/ Yaw	360°(Roll), 65°(Pitch), 55°(Yaw)
Illumination Light Source	White point light source/ Red area light source/ Blue area light source
Aiming Mode	Laser aiming
Communication Interface	RS232, USB keyboard, USB COM
Operating Voltage	+5V±5% VDC
Standby Current	150mA
Operating Current	310mA
Consumption	1.55W
Housing Material	PC
Weight	352g
Dimensions (LxWxH)	191.8mmx130.2 mmx76.9 mm
Operating Temperature	0° C ~ +45° C
Storage Temperature	-10℃ ~ +50℃
Relative Humidity	5% ~ 85% (non-condensing)
IP Rating	IP67
Certification	CE、FCC、RoHS
Ambient Light Immunity	Sunshine: 10000 Lux, Incandescent lamp: 6000 Lux, Fluorescent lamp: 2000 Lux
Shock Resistance	withstanding multiple impacts of falling from a height of 1.2 meters onto the cement floor (allowable deviation of 5°)
Readable Code Symbologies	1D, 2D and stacked codes that comply with national and international standards
Maximum Reading Accuracy	1D code: 3mil, 2D code: 4mil

Standard Model Configuration Table

● REC   HS3660

Model	Specific description
HS3660-30-U-02A	HS3660 handheld wired barcode reader, DPM illumination, USB set, 2-meter USB cable
HS3660-30-R-02B	HS3660 handheld wired barcode reader, DPM illumination, RS232 set, 2-meter Serial cable, 5V power supply

Dimensions

Unit（mm）

120

77

130
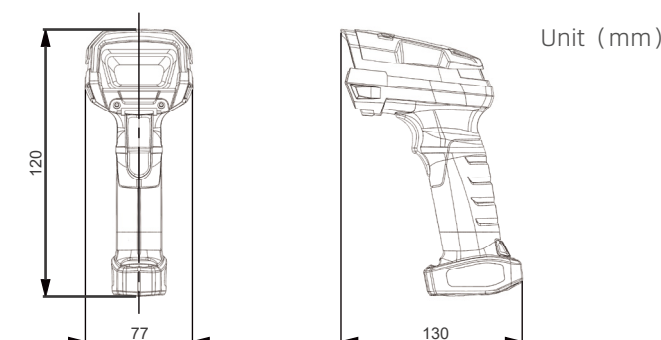
HS3150

Wired Handheld Industrial Barcode Scanner

HS3150 is a universal handheld barcode reader, equipped with a megapixel sensor and efficient processor. It can quickly read label barcodes, screen barcodes and good DPM barcodes. The product has a lightweight appearance and is easy to hold and operate. It is widely applicable in electronics, traceability, medical industries, etc.

Product Features

Equipped with a 1.3 megapixel sensor

The use of high pixel sensors significantly improves reading accuracy (3mil) and working distance compared to the products of previous generation

Meet universal code reading scenarios

The reading accuracy can reach 3mil 1D and 5mil 2D;
Easily read label barcodes and screen barcodes;
Be capable of reading good-quality DPM barcodes such as laser engraving codes and printed codes

Humanized structural design

Lightweight appearance design, easy to hold, strong and durable, suitable for long-term and high-frequency use

Applications

Home appliances manufacturing	Electronics manufacturing	Transportation	Food and drug traceability

Reading Distance

Unit（mm）

Barcode Specifications	Nearest	Farthest
3.34mil Code 128	40	125
5mil Code 128	30	164
10mil Code 128	15	255
15mil Code 128	15	281
5mil DataMatrix	38	92
6.67mil DataMatrix	33	137
10mil DataMatrix	20	198
15mil DataMatrix	20	227

Reading Distance And Visual Field

|	
Sensor Type	CMOS sensor
Image Resolution	1280x1024
Acquisition Speed	Up to 60 frames per second
Viewing Angle	44° (Horizontal), 34° (Vertical)
Roll/ Pitch/ Yaw	360°(Roll), 65°(Pitch), 55°(Yaw)
Reading Direction	Elevation angle ±60°　Oblique angle ±55°
Illumination	White LED (Available in red and blue)
Aiming Mode	Red LED
Communication Interface	RS232, USB keyboard, USB COM
Operating Voltage	+5V±5% VDC
Standby Current	150mA
Operating Current	370mA
Consumption	1.85W
Housing Material	PC
Weight	146g
Dimensions (LxWxH)	163mm x 69.5mm x 106mm
Operating Temperature	0℃ ~ +45℃
Storage Temperature	-10℃ ~ +50℃
Relative Humidity	5% ~ 95% (non-condensing)
IP Rating	IP54
Certification	CE、FCC、RoHS
Ambient Light Immunity	Sunshine: 10000 Lux　Incandescent lamp: 6000 Lux
Shock Resistance	Withstanding multiple impacts of falling from a height of 1.2 meter onto the cement floor (allowable deflection of 5°)
Readable Code Symbologies	1D, 2D and stacked codes that comply with national and international standards
Maximum Reading Accuracy	1D code: 3mil　2D code: 5mil

Standard Model Configuration Table

● REC　　　　　　　　HS3660

Model	Specific description
HS3150-00-U-02A	HS3150 handheld wired barcode reader, white LED illumination, USB set, 2-meter USB cable
HS3150-00-R-02B	HS3150 handheld wired barcode reader, white LED illumination, RS232 set, 2-meter Serial cable, 5V power supply

Dimensions

Unit（mm）

163　69.5　106
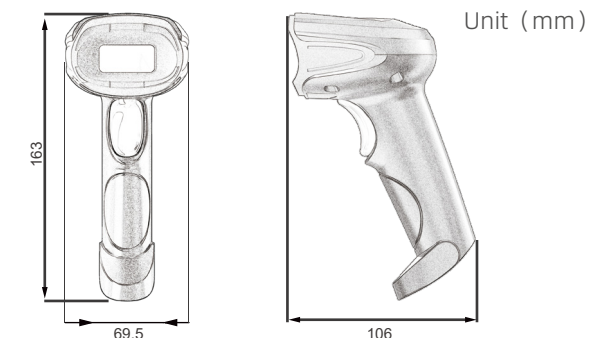
ACCESSORIES
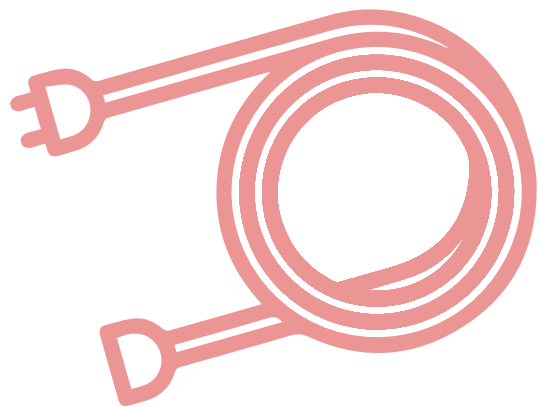
Category: Communication cable
with aviation connector

Function description: Ethernet communication;
Serial communication; USB communication
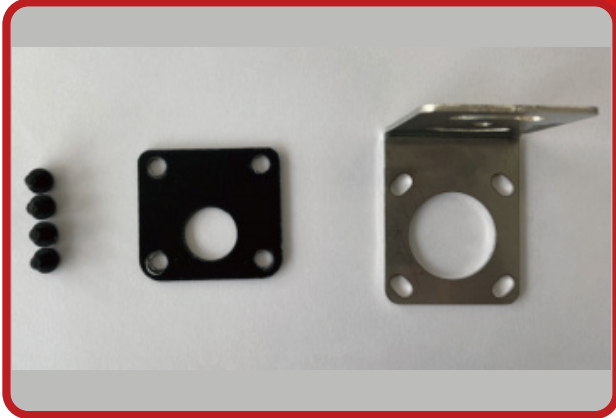IO terminals / External power supply

Applicable series: FV6X / FV10X / FV2X0 series

Category: Type-C communication cable

Function description: Serial communication;
USB communication IO terminals /
External power supply

Applicable series: FV3X series

Category: Dragging-resistant cable

Function description: Ethernet communication;
Serial communication IO terminals /
External power supply 5 million times
dragging in multiple directions

Applicable series: FV6X / FV10X / FV2X0 series

Category: DC power supply

Function description: 5V / 24V
Device power supply

Applicable series: All series

Category: Optical kit

Function description: Polarization kit
Atomization kit Polarization
and atomization combined kit

Applicable series: FV10X / FV2X0 series

Category: Fixing piece (set) for installation

Function description: L-shaped metal fixing plate
Insulating gasket
Insulating screws

Applicable series: FV series

Category: Integrated illuminant

Function description: Integrated area illuminant

Applicable series: FV10X series
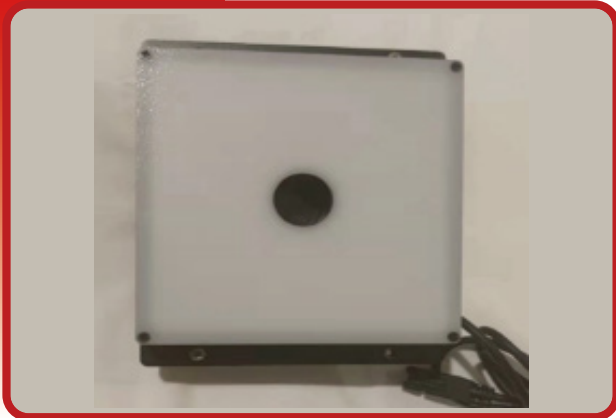
SOLUTIONS

Photovoltaic Industry

Applications
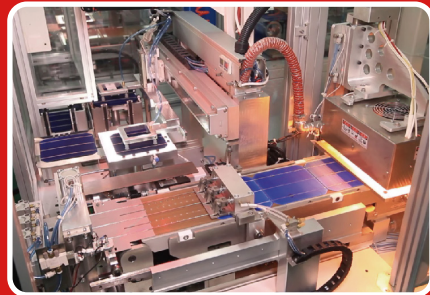
String Welding Machine Station

Laminator Station
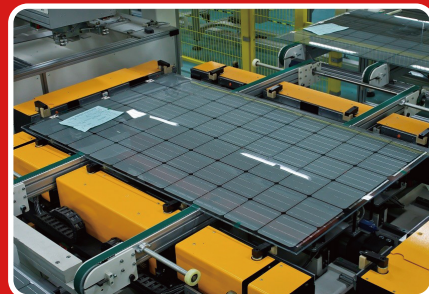
Framing Station

EL Test
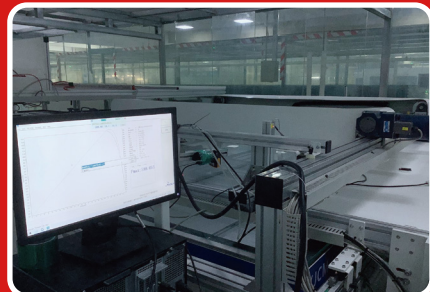
IV Test Station

FI Upper and Lower
Code Reading Station

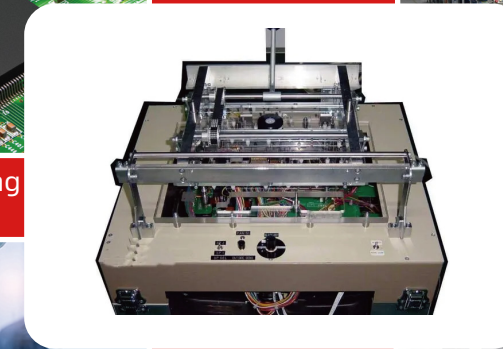Recommended series：HS3155/FV6X series/FV10X series/FV2X0 series

Electronics Industry

Applications

Circuit Board Manufacturing

Assembly Line

Test Fixture

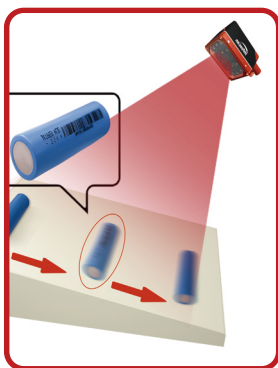Automation Equipment Integration

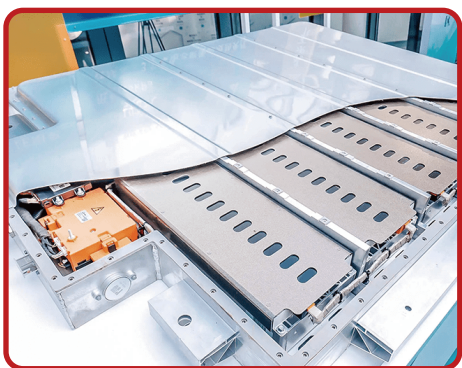Packaging and Transportation

Recommended series：HS3260/FV3X series/FV6X series/FV10X series

New Energy Industry

Applications

Multiple Barcodes Wide Range Reading
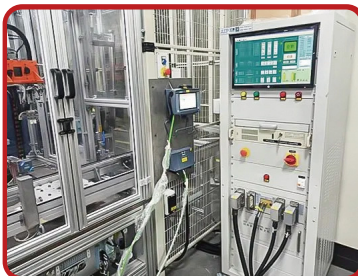
Dynamic Acquisition

Aluminum Shell Battery/Soft Pack Battery
/Cylindrical Battery/Special-shaped Batteries, etc.,
Various Packaging Forms
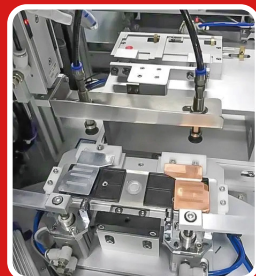
Tab Welding　　　Repair Station　　　Automated Testing　　　Filling Machine Station

Technical Proposal

Atomized illumination

·Improve decoding performance of metal surface patterns and irregular reflections on aluminum shell batteries

Use spot lighting　　　Use atomization lighting

Blue LED Illumination

·For the common blue film black barcode used in soft-packed battery packs, the imaging effect is better

Atomized illumination　　　Blue LED illuminant

Rotatable 90° connector

Innovative Structural Design and Accessories

·Rotatable 90° connector for easy wiring, installation and use in limited spaces

·Corrosion-resistant model to avoid corrosion of lenses by corrosive acids and to avoid the degradation of imaging quality

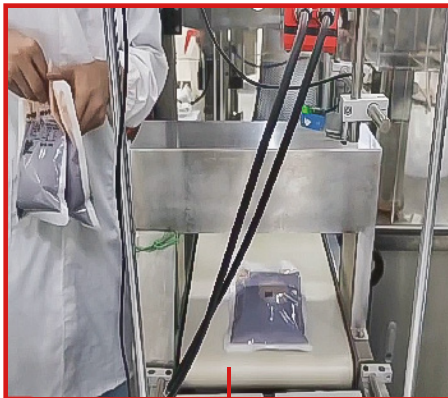·Provide high-flexible cables (cable standard for robot) to meet multi-directional bending requirements

90°

Recommended series：HS3660 series/FV6X series/FV10X series

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Tracing Industry

Applications

Cosmetic Box
Code Reading

Code Reading of Pharmaceutical
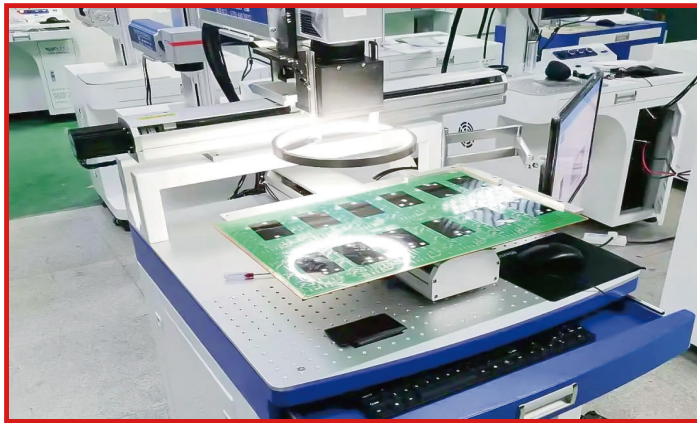Packaging Bags

Large Field of
View Acquisition

Packaging Bag/Bottle/
Box Code Acquisition

High Speed/
High Frequency Acquisition

Printing Barcodes/Labels/Inkjet Printing/
Laser Engraving Codes

Recommended series：HS3050/HS3155/FV10X series/FV2X0 series

38

Automation Equipment Integration

Applications

- Miniaturized structural design, easy to install in narrow spaces

- Widely used in DPM codes such as laser engraving and inkjet printing codes

- Supports Ethernet protocol, compatible with PLC and automation equipment communication integration
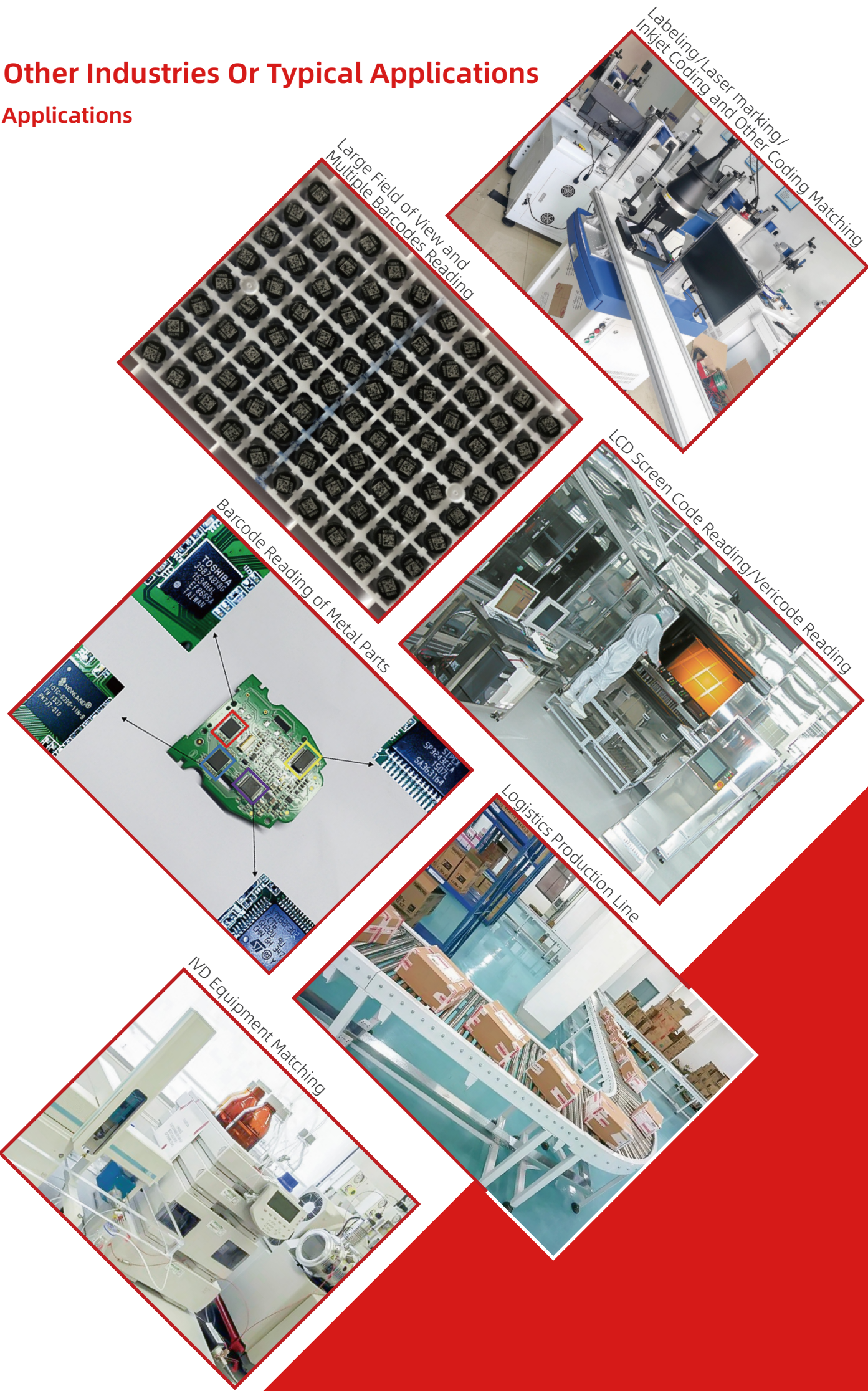

Assembly Line Equipment Integration
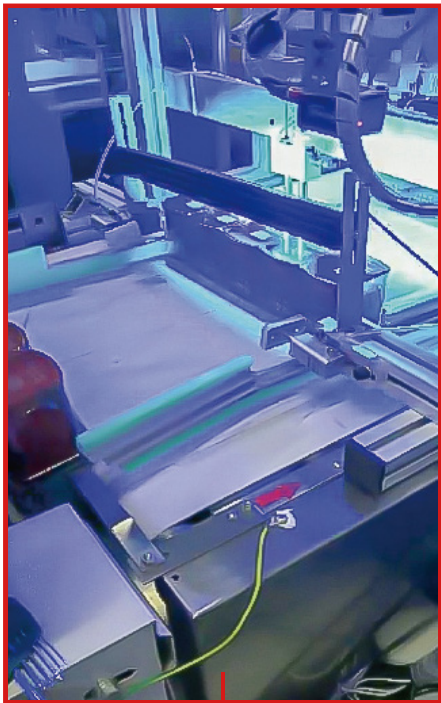
Automation Equipment Integration

Test Fixture Integration

Recommended series： FV3X series/FV6X series/FV10X series

Other Industries Or Typical Applications

Applications

Labeling/Laser marking/ Inkjet Coding and Other Coding Matching

Large Field of View and Multiple Barcodes Reading

LCD Screen Code Reading/Vericode Reading

Barcode Reading of Metal Parts

Logistics Production Line

IVD Equipment Matching

WORRY-FREE SERVICE

Answers to pre-sales inquiries

⬇

After procurement of samples, engineers and customer service personnel provide testing support and following-up services

⬇

Provide our partners with systematic product training and on-site testing services if necessary

⬇

Warranty period is 12 to 36 months; for every 50 units purchased, 1 unit will be given as a free spare product

CERTIFICATIONS AND HONORS