

High Performance AI-Powered 2.3 / 5 MP Code Reader

[VN-1000]

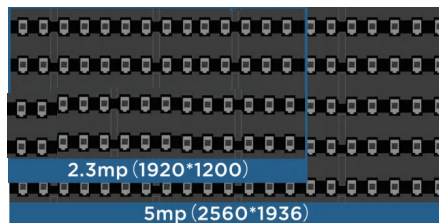
- Deep-learning capability for challenging codes
- 100 to 1000 mm reading distance
- 16 LEDs, 4 sets of individual controlled light source



Code Reader

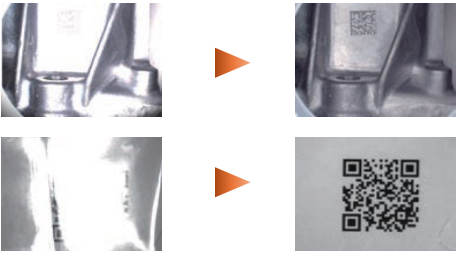
Larger field of view at longer range

With 2.3/ 5 megapixels sensor selection, the sensors provide a larger field of view. More codes can be fitted in the field of view with higher megapixel model.



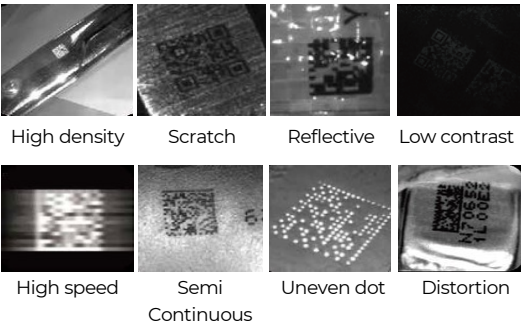
Auto-polarize function

The VN-1000 series automatically corrects and configures various parameter adjustments to achieve the optimal settings.



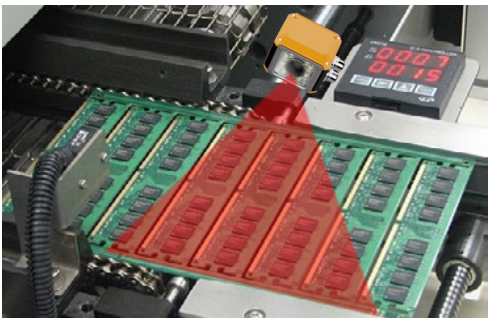
Adaptive code reading with accuracy

VN-1000 adjusts high print density, scratch, or reflective codes, to ensure the codes are captured successfully. The system automatically adjusts to optimal settings base on different code condition.



Read multiple codes all at once

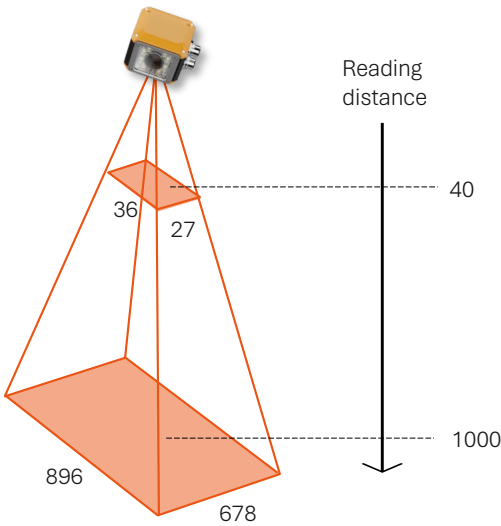
Reading multiple codes on PCB all at once within the field of view of the code reader, even at low-lighting environment.



Read up to 200 codes

Thanks to the wide field of view, user can now insert as many codes as possible (up to 200 codes) into 1 FOV. Delivering lightning-fast, high-precision scanning for maximum productivity and seamless automation

200 CODE READING
AT ONCE



Overview

Code Reader

Handheld Reader

Vision Sensor

Vision System

Fiberoptic Sensor

Photoelectric Sensor

RGB Colour Sensor

Proximity Sensor

Ultrasonic Sensor

Safety Curtain

Ionizer

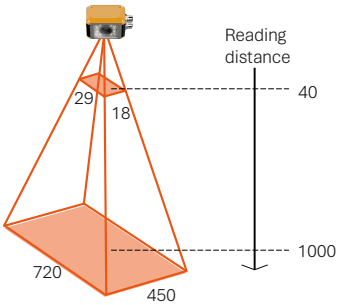
Reading Range

unit: mm

VN-1000 2.3 MP

8 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
40	29	18	0.018	0.030
100	72	45	0.045	0.075
200	144	90	0.090	0.150
300	216	135	0.135	0.225
400	288	180	0.180	0.300
500	360	225	0.225	0.375
600	432	270	0.270	0.450
700	504	315	0.315	0.525
800	576	360	0.360	0.600
900	648	405	0.405	0.675
1000	720	450	0.450	0.750



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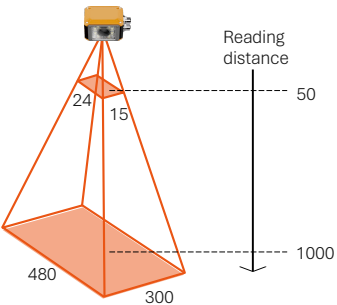
Ultrasonic Sensor

Safety Curtain

Ionizer

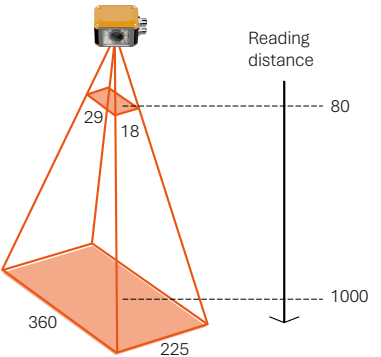
12 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
50	24	15	0.015	0.025
100	48	30	0.030	0.050
200	96	60	0.060	0.100
300	144	90	0.090	0.150
400	192	120	0.120	0.200
500	240	150	0.150	0.250
600	288	180	0.180	0.300
700	336	210	0.210	0.350
800	384	240	0.240	0.400
900	432	270	0.270	0.450
1000	480	300	0.300	0.500



16 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
80	29	18	0.018	0.030
100	36	23	0.023	0.038
200	72	45	0.045	0.075
300	108	68	0.068	0.113
400	144	90	0.090	0.150
500	180	113	0.113	0.188
600	216	135	0.135	0.225
700	252	158	0.158	0.263
800	288	180	0.180	0.300
900	324	202	0.203	0.338
1000	360	225	0.225	0.375



VN-1000 5 MP

8 mm lens

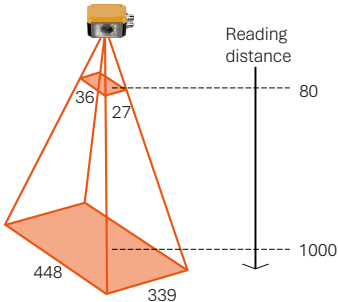
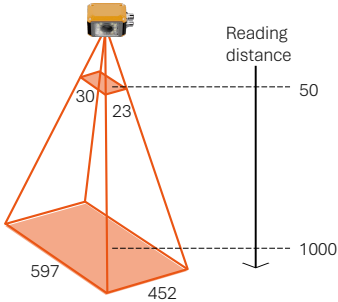
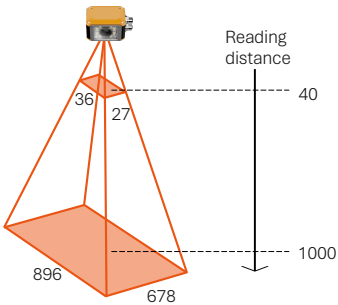
Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
40	36	27	0.017	0.028
100	90	68	0.042	0.070
200	179	136	0.084	0.140
300	269	203	0.126	0.210
400	358	271	0.168	0.280
500	448	339	0.210	0.350
600	538	407	0.252	0.420
700	627	474	0.294	0.490
800	717	542	0.336	0.560
900	806	610	0.378	0.630
1000	896	678	0.420	0.700

12 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
50	30	23	0.014	0.023
100	60	45	0.028	0.047
200	119	90	0.056	0.093
300	179	136	0.084	0.140
400	239	181	0.112	0.187
500	299	226	0.140	0.234
600	358	271	0.168	0.280
700	418	316	0.196	0.327
800	478	361	0.224	0.373
900	538	407	0.252	0.420
1000	597	452	0.280	0.466

16 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
80	36	27	0.017	0.028
100	45	34	0.021	0.035
200	90	68	0.042	0.070
300	134	102	0.063	0.105
400	179	136	0.084	0.140
500	224	169	0.105	0.175
600	269	203	0.126	0.210
700	314	237	0.147	0.245
800	358	271	0.168	0.280
900	403	305	0.189	0.315
1000	448	339	0.210	0.350



Code Reader

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VN-1000 Series Variant

Model	Light Source	Megapixel	Lens	Focus Mode
VN-1000-111	White	2.3MP (1920 x 1200)	8 mm	Auto
VN-1000-112	Red	2.3MP (1920 x 1200)	8 mm	
VN-1000-121	White	2.3MP (1920 x 1200)	12 mm	
VN-1000-122	Red	2.3MP (1920 x 1200)	12 mm	
VN-1000-131	White	2.3MP (1920 x 1200)	16 mm	
VN-1000-132	Red	2.3MP (1920 x 1200)	16 mm	
VN-1000-211	White	5 MP (2560 x 1936)	8 mm	
VN-1000-212	Red	5 MP (2560 x 1936)	8 mm	
VN-1000-221	White	5 MP (2560 x 1936)	12 mm	
VN-1000-222	Red	5 MP (2560 x 1936)	12 mm	
VN-1000-231	White	5 MP (2560 x 1936)	16 mm	
VN-1000-232	Red	5 MP (2560 x 1936)	16 mm	

Accessories Lineup

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Main unit



Code Reader
VN-1000

Cable



Control Cable (RS232)
3 m: M12-12PIN-PC-3M-F-B
5 m: M12-12PIN-PC-5M-F-B
10 m: M12-12PIN-PC-10M-F-B

Ethernet Cable



Ethernet Cable (RJ45)
3 m: M12-8PIN-3M
5 m: M12-8PIN-5M
10 m: M12-8PIN-10M

Power Supply



24V Power Adapter
FG-168

Bracket & Screw



L Shape Installation Bracket
FG-1001

Software



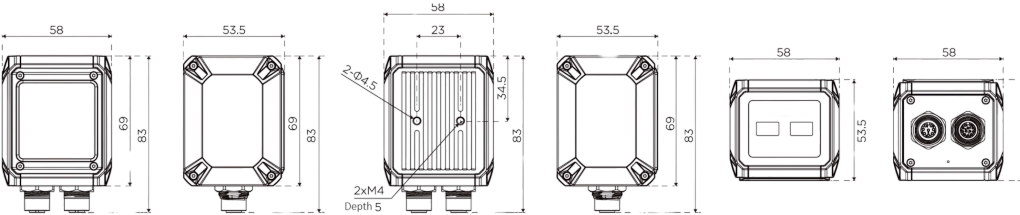
Barcode Scanner Software
FG-S01

Specifications

Model			VN-1000 (2.3 megapixels)		VN-1000 (5 megapixels)	
Receiver	Sensor		CMOS image sensor			
	Number of pixels		1920 x 1200		2560 x 1936	
	Focus		Mechanical autofocus			
	Frame Rate		60			
	Pixel Size		3 μm x 3 μm			
Sensor Size		1/2.6"		1/1.8"		
Emitter	Illumination light source		High intensity red / white LED			
	Pointer light source		1 Green LED			
Reading	Symbology	2D	DataMatrix, QR Code, Micro QR, PDF417, MicroPDF417			
		Barcode	Code 39, Code 93, Code 128, EAN-8, EAN-13, Interleaved 2 of 5, UPC, Pharmacode			
	Minimum Resolution	2D	0.030 mm		0.028 mm	
		Barcode	0.018 mm		0.017 mm	
	Focal lens		8 /16 mm			
	Reading distance		40 to 1,000 mm			
I/O	Number of control inputs		2			
	Number of control outputs		3			
	Supported protocol	Ethernet	TCP / IP, Ethernet / IP, Modbus, Profinet			
		Serial	RS-232C			
Environment Resistance	Enclosure rating		IP67			
	Surrounding temperature		0 to +45°C			
	Ambient storage temperature		-20 to +70°C			
	Relative humidity		5 to 95% RH (No condensation)			
Rating	Power consumption		15 W			
	Power supply voltage		24 VDC			
Weight			Approx. 300 g			
Dimension			58 x 53.5 x 69 mm			

Dimensions

unit: mm



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