AI-Powered Liquid Lens 1D / 2D Code Reader
[VN-800]

- 1288 x 1088 1.4 MP image resolution
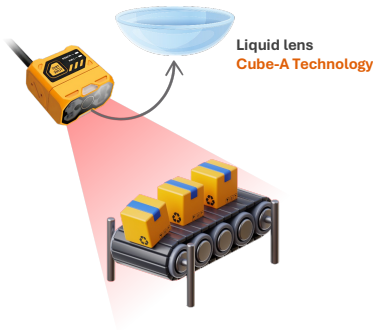- Capability to read 1 x 1 mm 2D code
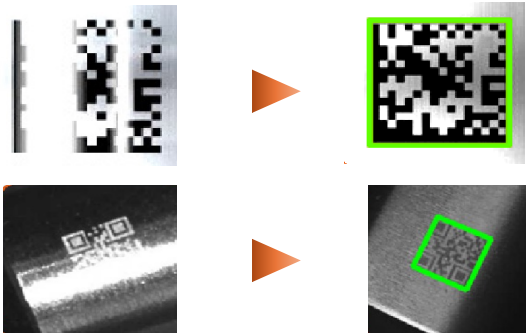- Built in liquid lens for high read rates

CE

Strive for 100% reading performance

Utilising advanced decoding algorithms and liquid lens technology, VN-800 enhances efficiency by achieving high read rates while dealing with low-light conditions and damaged codes.

Liquid lens
Cube-A Technology

Auto-focus function

Focusing function with conventional models was done manually, focusing function on the VN-800 can now be done automatically with just a click of the "Execute" button.

Image adjustment	
Automatic exposure	Turn on
Autofocus	Turn on
Automatic code search	Turn on
Execute	

Compact sized, easily fitted

Capture any target in any environment. The device is 47 x 25 x 43 mm in size, helps user easily fit into any space.

Auto polarisation function

Polarisation tuning to eliminate glare and noise can be done automatically with the VN-800 series.
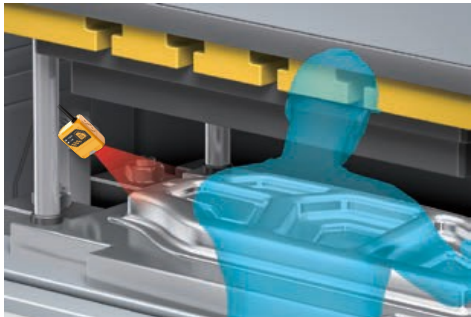
Works with 30 and more materials

VN-800 compatible with over 30 materials, including aluminum, steel, and various reflective surfaces. This capability ensures reliable performance across scratched or reflective surfaces.
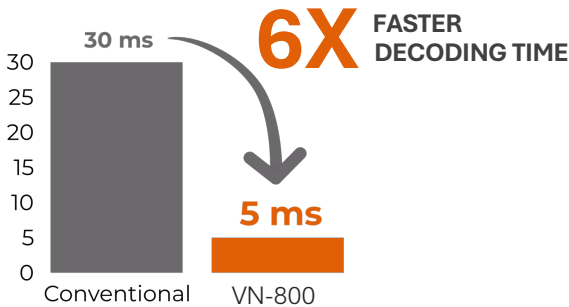
Scratched   Uneven printing   Reflective surface

6 times faster decoding speed

The deep learning algorithm enhances decoding efficiency by 6 times, cutting processing time to 5ms for unmatched speed and reliability.

30 ms

6X FASTER DECODING TIME

5 ms

Conventional   VN-800

IP67 enclosure rating

A well-engineered and durable structure ensures a high level of waterproofing, providing long-lasting protection against moisture and environmental conditions.
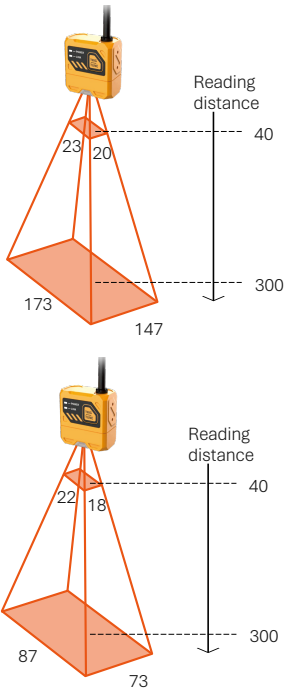
Reading Range
unit: mm

VN-800 1.4 MP

6 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
40	23	20	0.022	0.036
100	58	50	0.054	0.091
150	87	73	0.082	0.136
200	116	98	0.109	0.181
300	173	147	0.162	0.270

16 mm lens

Reading Range	Width	Height	Minimum Resolution	
			Barcode	2D
100	22	18	0.021	0.034
200	43	37	0.040	0.067
300	65	55	0.061	0.102
400	87	73	0.082	0.136

VN-800 Series Variant

Model	Light Source	Megapixel	Lens	Focus Mode
VN-800-111	White	1.4MP (1280 x 1088)	6 mm	
VN-800-112	Red	1.4MP (1280 x 1088)	6 mm	Auto
VN-800-121	White	1.4MP (1280 x 1088)	16 mm	
VN-800-122	Red	1.4MP (1280 x 1088)	16 mm	

Accessories Lineup

Main unit — Code Reader VN-800

Cable — Control Cable (RJ45, RS232)
3 m: HDB15P-M-ETH-3M
5 m: HDB15P-M-ETH-5M
10 m: HDB15P-M-ETH-10M

Power Supply — 24V Power Adapter FG-168

Bracket & Screw — L Shape Installation Bracket FG-801

Software — Barcode Scanner Software FG-S01

VN-800 Liquid Lens Code Reader

Specifications

Model			VN-800
Receiver	Sensor		CMOS image sensor
	Number of pixels		1288 x 1088
	Focus		Autofocus
	Frame Rate		60
	Pixel Size		3 µm x 3 µm
Emitter	Illumination light source		High intensity red/white LED
	Pointer light source		Green LED
Reading	Symbology	2D	DataMatrix, QR Code, Mircro QR, PDF417
		Barcode	Code 39, Code 93, Code 128, EAN-8, EAN-13, Interleaved 2 of 5, UPC, Pharmacode
	Minimum Resolution	2D	0.031 mm
		Barcode	0.015 mm
	Focal lens		6 mm
	Reading distance		40 to 400 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 +45ºC
	Ambient storage temperature		-20 to +70ºC
	Relative humidity		5 to 95% RH (No condensation)
Rating	Power consumption		5 W
	Power supply voltage		24 VDC
Weight			Approx. 110 g
Dimension			47 x 25 x 43 mm

Dimensions
unit: mm