

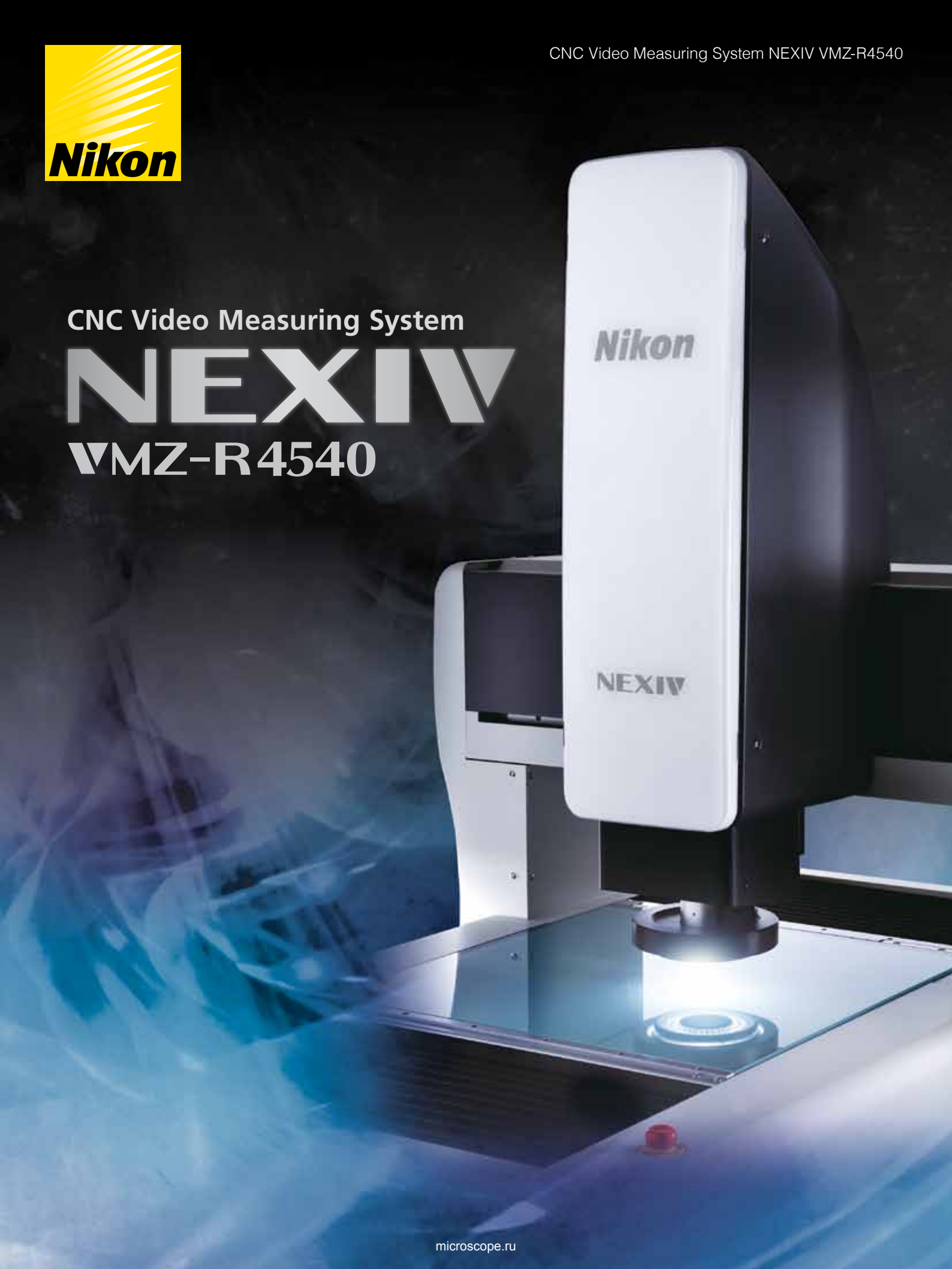


CNC Video Measuring System NEXIV VMZ-R4540

CNC Video Measuring System

NEXIV

VMZ-R4540



The new NEXIV incorporates the latest in technology and delivers high accuracy

4 types of optical zoom systems

Type 1, 2, and 3 zoom systems provide clear and low distortion image and high NA. Type A zoom system is designed for wide field of view and long working distance.

Magnification vs field of view (mm)

Type 1	Optical magnification	0.5x	1x	2x	4x	7.5x
	Total magnification	18x	36x	72x	144x	270x
	Field of View (mm)	9.33x7	4.67x3.5	2.33x1.75	1.165x0.875	0.622x0.467
Type 2	Optical magnification	1x	2x	4x	8x	15x
	Total magnification	36x	72x	144x	288x	540x
	Field of View (mm)	4.67x3.5	2.33x1.75	1.165x0.875	0.582x0.437	0.311x0.233
Type 3	Optical magnification	2x	4x	8x	16x	30x
	Total magnification	72x	144x	288x	576x	1080x
	Field of View (mm)	2.33x1.75	1.165x0.875	0.582x0.437	0.291x0.218	0.155x0.117
Type A	Optical magnification	0.35x	0.6x	1x	1.8x	3.5x
	Total magnification	14x	24x	40x	73x	141x
	Field of View (mm)	13.3x10	7.8x5.8	4.7x3.5	2.6x1.9	1.33x1

*Total magnification listed above represent those on the monitor screen when a 20" monitor is set to the UXGA (1600 x 1200 pixels) mode.



New Laser Auto Focus designed to detect surface of thin transparent material

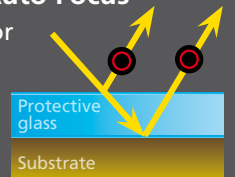
New

New Laser Auto Focus works with high speed, high accuracy same as VMR series Laser Auto Focus.

*Except for Type A

New Laser Auto Focus

The new sensor detect both top and back surface.

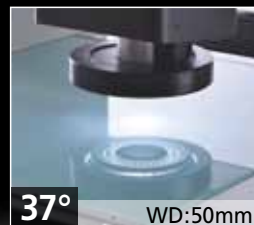


New 8-sector Ring Light system with three incident angles

New

Episcopic, diascope and Ring illumination employ white LED and provide stability and long life. New Ring Light System with three incident angles designed for correct edge capture.

*Except for Type A



37° WD:50mm



55° WD:36mm



78° WD:10mm

Low incident angle / Long WD

High incident angle / short WD

advancements and throughput.

NEXIV

VMZ-R4540

Measuring accuracy is further improved

New

Measuring accuracy is further improved with high resolution linear encoder 'ModuRay' developed by Nikon.



Suitable stroke for a variety of samples

New

450 x 400 x 200mm stroke is suitable for a large range of applications with enough room for fixture.

Faster throughput

High rate of data transfer combined with fast illumination control provide faster throughput.

Streamlined and logical software

New

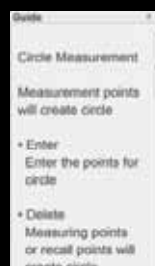
Redesigned User Interface with Wizard makes it easy for beginners to operate the system and create automated measurement programs.

[Standard]

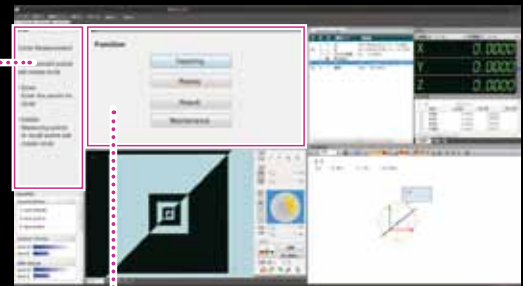
- Virtual Auto Measure
- Profiler
- Measuring Report Generator

[Option]

- EDF Stitching Express



Guide panel



Main panel

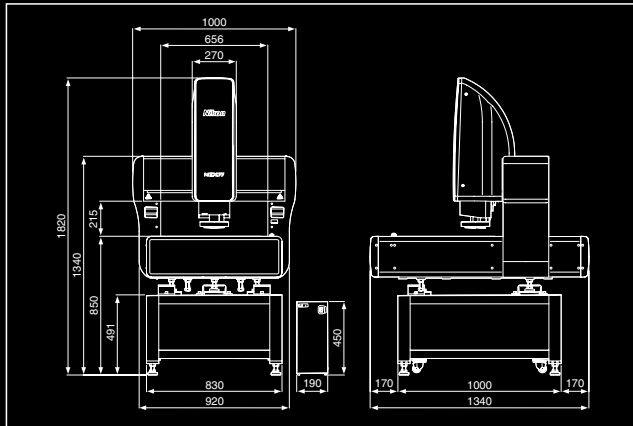


Teaching wizard

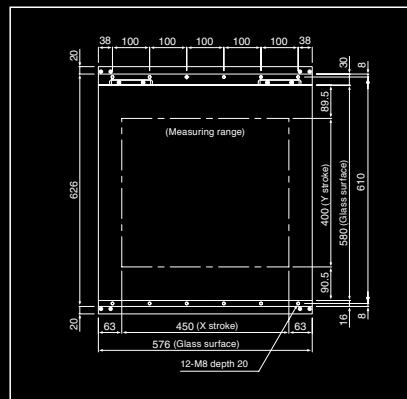
Specification

Model	VMZ-R 4540	
Stroke (XxYxZ)	450 x 400 x 200mm (17.7x15.7x7.8 inch)	
Minimum readout	0.1µm	
Maximum workpiece weight	40kg (88.2lb)	
Measuring uncertainty (Work piece max 20kg)	E _{UX, MPE} E _{UY, MPE} : 1.2+4L/1000µm E _{UXY, MPE} : 2+4L/1000µm	
Z measurement uncertainty	E _{UZ, MPE} : 1.2+5L/1000µm (Guaranteed by Laser AF)	
Camera	Progressive scan; B&W / 3CCD Color / High Resolution (Option) Contact Nikon sales rep. in case of Type3 with Color CCD	
Working Distance	Type 1/2/3: 50mm, Type A: 73.5mm (LaserAF 63mm)	
Magnification vs. field of view	Type 1: 0.5 ~ 7.5x / 9.33 x 7 ~ 0.622 x 0.467mm Type 2: 1 ~ 15x / 4.67 x 3.5 ~ 0.311 x 0.233mm Type 3: 2 ~ 30x / 2.33 x 1.75 ~ 0.155 ~ 0.117mm Type A: 0.35 ~ 3.5x / 13.3 x 10 ~ 1.33 x 1mm	
Auto focus	Laser AF (Type A option) / Image AF	
Illumination	Diascopic, Episcopic, 8 segment ring illumination (Type1/2/3 3 incident angle, Type A single incident angle)	
Power source	AC 100-240V 50/60Hz	
Power consumption	5A-2.5A	
Dimensions & Weight (WxDxH)	Main unit & table: 1020 x 1340 x 1820mm / 500kg (40.2 x 52.8 x 71.7 inch / 1100lb) Controller: 190 x 450 x 440 / 15kg (7.5 x 17.7 x 17.3 inch / 33lb)	
Footprint	2300 x 1700mm (90.6 x 66.9 inch)	

Dimensions (mm)



Position of tapped holes for custom fixtures (mm)



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2013 ©2013 NIKON CORPORATION
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•Monitor images are simulated. Company names and product names in this brochure are their registered trademarks or trademarks.

CLASS 1 LASER PRODUCT



WARNING

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING THE EQUIPMENT.



ISO 9001 Certified
for NIKON CORPORATION
Instruments Company



ISO 14001 Certified
for NIKON CORPORATION
Yokohama Plant



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