

# Leica Nova MS50 MultiStation

## ANGLE MEASUREMENT

Accuracy <sup>1</sup> Hz and V	Absolute, continuous, quadruple	1" (0.3 mgon)
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## DISTANCE MEASUREMENT

Range <sup>2</sup>	Prism (GPR1, GPH1P) <sup>3</sup>	1.5 m to >10000 m
	Non-Prism / Any surface <sup>4</sup>	1.5 m to 2000 m
Accuracy / Measurement time	Single (prism) <sup>2,5</sup>	1 mm + 1.5 ppm / typ. 1.5 s
	Single (Any surface) <sup>2,4,5,6</sup>	2 mm + 2 ppm / typ. 1.5 s
Laser dot size	at 50 m	8 mm x 20 mm
Measurement technology	Wave Form Digitising	coaxial, visible red laser

## SCANNING

Max. Range <sup>7</sup> / Range noise (1 sigma) <sup>4</sup>	1000 Hz mode	300 m / 1.0 mm at 50 m
	250 Hz mode	400 m / 0.8 mm at 50 m
	62 Hz mode	500 m / 0.6 mm at 50 m
	1 Hz mode	1000 m / 0.6 mm at 50 m
Visualisation of point cloud	Onboard 3D point cloud viewer, including true colour point clouds	

## IMAGING

Overview and telescope camera	Sensor	5 Mpixel CMOS sensor
	Field of view (overview / telescope)	19.4° / 1.5°
	Frame rate	Up to 20 frames per second

## MOTORISATION

Direct drives based on Piezo technology	Rotation speed / Time to Change Face	max. 200 gon (180°) per s / typ. 2.9 s
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## AUTOMATIC AIMING (ATR)

Range ATR mode <sup>2</sup> / Lock mode <sup>2</sup>	Circular prism (GPR1, GPH1P)	1000 m / 800 m
	360° prism (GRZ4, GRZ122)	800 m / 600 m
Accuracy <sup>1,2</sup> / Measurement time	ATR angle accuracy Hz, V	1" (0.3 mgon) / typ. 2.5 s

## POWERSEARCH

Range / Search time <sup>8</sup>	360° prism (GRZ4, GRZ122)	300 m / typ. 5 s
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## GUIDE LIGHT (EGL)

Working Range / Accuracy	5–150 m / typ. 5 cm @ 100 m	
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## GENERAL

Autofocus telescope	Magnification / Focus Range	30 x / 1.7 m to infinity
Display and Keyboard	VGA, colour, touch, both faces	36 keys, illumination
Operation	3x endless drives, 1x Servofocus drive, 2x Autofocus	keys, User-definable SmartKey
Power management	Exchangeable Lithium-Ion battery with internal charging capability	Operating Time 7–9 h
Data storage	Internal memory / Memory card	1 GB / SD card 1 GB or 8 GB
Interfaces	RS232, USB, Bluetooth®, WLAN	
Weight	MultiStation incl. battery	7.6 kg
Environmental specifications	Working temperature range	–20°C to +50°C
	Dust & Water (IEC 60529) / Blowing rain	IP65 / MIL-STD-810G, Method 506.5-I
	Humidity	95%, non-condensing