

Leica Nova MS60

Data sheet

Nova



Engaging software

The Leica Nova MS60 MultiStation comes with the revolutionary Leica Captivate software, turning complex data into the most realistic and workable 3D models. With easy-to-use apps and familiar touch technology, all forms of measured and design data can be viewed in all dimensions. Leica Captivate spans industries and applications with little more than a simple swipe, regardless of whether you work with GNSS, total stations or both.



Infinitely bridging the field to the office

While Leica Captivate captures and models data in the field, Leica Infinity processes the information back in the office. A smooth data transfer ensures the project stays on track. Leica Captivate and Leica Infinity work in conjunction to join previous survey data and edit projects faster and more efficiently.

ACC»

Customer care is only a click away

Through Active Customer Care (ACC), a global network of experienced professionals is only a click away to expertly guide you through any problem. Eliminate delays with superior technical service, finish jobs faster with excellent consultancy support, and avoid costly site revisits with online service to send and receive data directly from the field. Control your costs with a tailored Customer Care Package, giving you peace of mind you're covered anywhere, anytime.

Leica Nova MS60 MultiStation

ANGLE MEASUREMENT

| | | |
|--------------------------------|---------------------------------|---------------|
| Accuracy ¹ Hz and V | Absolute, continuous, quadruple | 1" (0.3 mgon) |
|--------------------------------|---------------------------------|---------------|

DISTANCE MEASUREMENT

| | | |
|-----------------------------|--|--|
| Range ² | Prism (GPR1, GPH1P) ³ Non-Prism / Any surface ⁴ | 1.5m to >10,000m 1.5m to 2000m |
| Accuracy / Measurement time | Single (prism) ^{2,5} Single (any surface) ^{2,4,5,6} | 1mm + 1.5ppm / typically 1.5s 2mm + 2ppm / typically 1.5s |
| Laser dot size | At 50m | 8mm x 20mm |
| Measurement technology | Wave Form Digitising | Coaxial, visible red laser |

SCANNING

| | | |
|--|--|---|
| Max. Range ⁷ / Range noise (1 sigma) ⁴ | 1000 Hz mode 250 Hz mode 62 Hz mode 1 Hz mode | 300m / 1.0mm at 50m 400m / 0.8mm at 50m 500m / 0.6mm at 50m 1000m / 0.6mm at 50m |
| Scan data | 3D point cloud including true colour, intensity and signal-to-noise data | |

IMAGING

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

MOTORISATION

| | | |
|---|--------------------------------------|---|
| Direct drives based on Piezo technology | Rotation speed / Time to change face | Maximum 200 gon (180°) per s / typically 2.9s |
|---|--------------------------------------|---|

AUTOMATIC AIMING - ATRplus

| | | |
|--|---|--------------------------------|
| Target aiming range ² / Target locking range ² | Circular prism (GPR1, GPH1P) 360° prism (GRZ4, GRZ122) | 1500m / 1000m 1000m / 1000m |
| Accuracy ^{1,2} / Measurement time | ATRplus angle accuracy Hz, V | 1" (0.3 mgon) / typically 2.5s |

POWERSEARCH

| | | |
|---------------------|---------------------------|---------------------|
| Range / Search time | 360° prism (GRZ4, GRZ122) | 300m / typically 5s |
|---------------------|---------------------------|---------------------|

GUIDE LIGHT (EGL)

| | | |
|--------------------------|-------------------------------|--|
| Working range / Accuracy | 5–150m / typically 5cm @ 100m | |
|--------------------------|-------------------------------|--|

GENERAL

| | | |
|------------------------------|--|--|
| Field software | Leica Captivate with apps | |
| Processor | TI OMAP4430 1GHz Dual-core ARM® Cortex™-A9 MPCore™ | Operating system - Windows EC7 |
| Autofocus telescope | Magnification / Focus Range | 30 x / 1.7m to infinity |
| Display and keyboard | 5" (inch), WVGA, colour, touch, both faces | 37 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 | 2 GB / SD card 1 GB or 8 GB |
| Interfaces | RS232, USB, Bluetooth®, WLAN | |
| Weight | MultiStation including battery | 7.7kg |
| Environmental specifications | Working temperature range Dust & Water (IEC 60529) / Blowing rain Humidity | –20°C to +50°C IP65 / MIL-STD-810G, Method 506.5-I 95%, non-condensing |

¹ Standard deviation ISO 17123-3

² Overcast, no haze, visibility about 40km, no heat shimmer

³ 1.5m to 3000m for 360° prisms (GRZ4, GRZ122)

⁴ Object in shade, sky overcast, Kodak Gray Card (90% reflective)

⁵ Standard deviation ISO 17123-4

⁶ Distance > 500m: Accuracy 4mm + 2ppm, Measurement time typically 4s

⁷ Object in shade, sky overcast, uninterrupted visibility, static target object, Kodak Gray Card (90% reflective)

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Laser radiation, avoid direct eye exposure. Class 3R laser product in accordance with IEC 60825-1:2014.

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