Nikon Nivo M Series Total Stations
Specifications Sheet

DISTANCE MEASUREMENT
Reflectorless mode (white target) 1 1.5 m to 300 m (4.9 ft to 984 ft)
Range with Nikon specified prisms
Good conditions (No haze, visibility over 40 km (25 miles))
With reflector sheet 5 x 5 cm (2 in x 2 in)
  Nivo2 M .......................... 1.5 m to 270 m (4.9 ft to 886 ft)
  Nivo3 M, Nivo5 M ................ 1.5 m to 300 m (4.9 ft to 984 ft)
With single prism 6.25 cm (2.5 in)
  Nivo2 M .......................... 1.5 m to 3000 m (4.9 ft to 9,843 ft)
  Nivo3 M, Nivo5 M ................. 1.5 m to 5,000 m (4.9 ft to 16,404 ft)
Accuracy 1 (Precise mode)
  Nivo2 M Prism .................. ±(2+2 ppm x D) mm
  Nivo2 M Reflectorless ....... ±(2+2 ppm x D) mm
  Nivo3 M, Nivo5 M Prism ....... ±(3+2 ppm x D) mm
  Nivo3 M, Nivo5 M Reflectorless ±(3+2 ppm x D) mm
Measuring interval 2
  Nivo2 M Precise mode ........ 1.6 sec.
  Nivo3 M, Nivo5 M Precise mode 1.5 sec.
  Normal mode .................. 0.8 sec.
  Reflectorless mode ......... 2.1 sec.
  Nivo3 M, Nivo5 M Normal mode 1.2 sec.
  Nivo3 M, Nivo5 M Normal mode 1.0 sec.
  Least count .................. 1 mm (0.002 ft)
  Normal mode ................. 10 mm (0.02 ft)

ANGLE MEASUREMENT
DIN 18723 accuracy (horizontal and vertical) ......... 2"/0.5 mgon Nivo2 M
3"/1 mgon Nivo3 M, Nivo5 M
5"/1.5 mgon Nivo5 M
Reading system .............. Absolute encoder
Circle diameter ............ 62 mm (2.4 in)
Horizontal/Vertical angle ...... Diametrical Nivo2 M, Nivo3 M
  Single Nivo5 M
Minimum increment (Degree, Gon, MIL4600) .................. Degree: 1/5/10"
  Gon: 0.2/1/2 mgon
  MIL4600: 0.005°/0.02/0.05 mil

TELESCOPE
Tube length .................. 125 mm (4.9 in)
Image .................................... Erect Magnification, .................. 30x (18X36x with optional eyepieces)
  Nivo2 M Effective diameter of objective ............ 40 mm (1.6 in)
  Nivo3 M, Nivo5 M EDM diameter ............. 45 mm (1.8 in)
  Nivo3 M, Nivo5 M Effective diameter of objective ............ 45 mm (1.8 in)
  Nivo3 M, Nivo5 M EDM diameter ............. 50 mm (2.0 in)
Field of view .................. 1°/20"
Resolving power ........... Coaxial Red Light
  Minimum focusing distance ...... 1.5 m (4.9 ft)
Laser Pointer .................... Coaxial Red Light
  + White objects with high reflectivity (KGC 90%). Measuring distance may vary depending on targets and measuring conditions.
  ii) ±(3 ppm x D) mm  ±(20°C to +10°C, +40°C to +50°C) ±(4 °F to +14 °F, +104 °F to +122 °F)
  iii) Measuring time may vary depending on measuring distance and conditions. For the initial measurement, it may take a few more seconds.
  iv) Battery life specification at 25°C (77 °F). Operation time may be shorter in low temperatures and if the battery is not new.

QUALITY • COMPACT • ACCURATE

TILT SENSOR
Type .................................................. Dual-axis
Method ................................................. Liquid-electric detection
Configuration range .............. 43.5°

COMMUNICATIONS
Communication ports .................. 1 x serial (RS-232C)
Wireless communications .................. integrated Bluetooth

POWER
Internal Li-ion battery (x2)
Output voltage .............................. 3.8 V DC
Operating time .............................. 19 hours (continuous distance/angle measurement)
approx. 57 hours (distance/angle measurement every 30 seconds)
approx. 62 hours (continuous angle measurement)

Charging time
Full charge ..................... 4 hours

GENERAL SPECIFICATIONS
Level vials
  Sensitivity of circular level vial ......... 10/2 mm
Optical plummet
  Image ........................................... Erect
  Field of view ............................... 5°
Display ..................................... Single side, backlit, graphic LCD (128x64 pixel)
Laser plummet (optional) .......... 4 levels
  Point memory ...................... 10,000 records
Dimensions (W x D x H) ........... 149 mm x 145 mm x 306 mm
  (5.8 x 5.75 x 12 in)
Weight (approx.)
  Nivo2 M Main unit (without battery) ........ 3.8 kg (8.4 lb)
  Nivo3 M, Nivo5 M Main unit (without battery) .... 3.6 kg (8.0 lb)
  Battery .................................. 0.1 kg (0.2 lb)
Carrying case ...................... 2.3 kg (5.1 lb)

ENVIRONMENTAL
Operating temperature range ............ −20°C to +50°C (−4°F to +122°F)
Storage temperature range ............ −25°C to +60°C (−13°F to +140°F)
Atmospheric correction
  Temperature range ............ −40°C to +60°C (−40°F to +140°F)
  Barometric pressure ............ 400 mmHg to 999 mmHg/533 hPa to 1,332 hPa/15.8 inHg to 39.3 inHg
Dust and water protection .............. IP66

CERTIFICATION
Class B Part 15 FCC certification, CE Mark approval, C-Tick.
Nikon safety IEC 60825-1 am2:2007
Nivo2 M Prism mode: Class 1 laser
Nivo3 M, Nivo5 M: Class 3R laser
Nivo2 M, Nivo3 M, Nivo5 M: Laser Pointer: Class 1 laser
Nivo3 M, Nivo5 M Reflectorless / Prism mode: Class 0 laser
Nivo2 M, Nivo3 M, Nivo5 M Laser Pointer: Class 2 laser
Bluetooth type approvals are country specific.

Specifications subject to change without notice.

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