

DISTANCE MEASUREMENT

| | |
|---|--|
| Reflectorless mode (white target) ¹ | 1.5 m to 300 m (4.9 ft to 984 ft) |
| Range with specified prisms | |
| Good conditions (No haze, visibility over 40 km (25 miles)) | |
| With reflector sheet 5 cm x 5 cm (2 in x 2 in) | |
| 2" | 1.5 m to 270 m (4.9 ft to 886 ft) |
| 5" | 1.5 m to 300 m (4.9 ft to 984 ft) |
| With single prism 6.25 cm (2.5 in) | |
| 2" | 1.5 m to 3,000 m (4.9 ft to 9,843 ft) |
| 5" | 1.5 m to 5,000 m (4.9 ft to 16,404 ft) |
| Accuracy ² (Precise mode) | |
| 2" Prism | ±(2+2 ppm x D) mm |
| 2" Reflectorless | ±(3+2 ppm x D) mm |
| 5" Prism | ±(3+2 ppm x D) mm |
| 5" Reflectorless | ±(3+2 ppm x D) mm |
| Measuring interval ³ | |
| Prism mode | |
| 2" Precise mode | 1.6 sec. |
| 5" Precise mode | 1.5 sec. |
| Normal mode | 0.8 sec. |
| Reflectorless mode | |
| 2" Precise mode | 2.1 sec. |
| 5" Precise mode | 1.8 sec. |
| 2" Normal mode | 1.2 sec. |
| 5" Normal mode | 1.0 sec. |
| Least count | |
| Precise mode | 1 mm (0.002 ft) |
| Normal mode | 10 mm (0.02 ft) |

ANGLE MEASUREMENT

| | |
|--|------------------------------|
| DIN 18723 accuracy (horizontal and vertical) | 2"/0.5 mgon |
| | 5"/1.5 mgon |
| Reading system | Absolute encoder |
| Circle diameter | .62 mm (2.4 in) |
| Horizontal/Vertical angle | Diametrical |
| Minimum increment (Degree, Gon, MIL6400) | Degree: 1/5/10" |
| | Gon: 0.2/1/2 mgon |
| | MIL6400: 0.005/0.02/0.05 mil |

TELESCOPE

| | |
|--|---------------------------------------|
| Tube length | 125 mm (4.9 in) |
| Image | Erect |
| Magnification | 30x (18x/36x with optional eyepieces) |
| 2" Effective diameter of objective | .40 mm (1.6 in) |
| 2" EDM diameter | .45 mm (1.8 in) |
| 5" Effective diameter of objective | .45 mm (1.8 in) |
| 5" EDM diameter | .50 mm (2.0 in) |
| Field of view | 1°20' |
| Resolving power | .3" |
| Minimum focusing distance | 1.5 m (4.9 ft) |
| Laser Pointer | Coaxial Red Light |

TILT SENSOR

| | |
|------------------------------|---------------------------|
| Type | Dual-axis |
| Method | Liquid-electric detection |
| Compensation range | ±3.5' |

1 White objects with high reflectivity (KGC 90%). Measuring distance may vary depending on targets and measuring conditions.
 2 ±(3+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)
 3 Measuring time may vary depending on measuring distance and conditions. For the initial measurement, it may take a few more seconds.
 4 Battery life specification at 25 °C (77 °F). Operation times may vary depending on the condition and deterioration of the battery.

Specifications subject to change without notice.

COMMUNICATIONS

| | |
|-----------------------------------|---|
| Communication ports | 1 x serial (RS-232C), 2 x USB (host and client) |
| Wireless communications | integrated Bluetooth |

POWER

| | |
|--|---|
| Internal Li-ion battery (x2) | |
| Output voltage | 3.8 V DC |
| Operating time ² | |
| 2" | approx. 12 hours (continuous distance/angle measurement) |
| approx. 26 hours (distance/angle measurement every 30 seconds) | |
| approx. 28 hours (continuous angle measurement) | |
| 5" | approx. 7.5 hours (continuous distance/angle measurement) |
| approx. 16 hours (distance/angle measurement every 30 seconds) | |
| approx. 20 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 |
| Magnification | 3x |
| Field of view | 5° |
| Focusing range | 0.5 m (1.6 ft) to ∞ |
| Display face 1 | QVGA, 16 bit color, TFT LCD, backlit (320x240 pixel) |
| Display face 2 | Backlit, graphic LCD (128x64 pixel) |
| Laser plummet (optional) | 4 levels |
| Point memory | 128 MB RAM, 128MB Flash memory |
| Dimensions (W x D x H) | 149 mm x 145 mm x 306 mm |
| | (5.8 in x 5.7 in x 12.0 in) |
| Weight (approx.) | |
| 2" Main unit (without battery) | 3.9 kg (8.6 lbs) |
| 5" Main unit (without battery) | 3.8 kg (8.4 lbs) |
| 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.
 Laser safety IEC 60825-1 am2:2007
 2" Reflectorless / Prism mode / Laser Pointer: Class 3R laser
 5" Reflectorless / Prism mode: Class 1 laser
 5" Laser Pointer: Class 2 laser
 Laser Plummet (optional): Class 2 laser
 Bluetooth type approvals are country specific.



SPECTRA PRECISION
 10355 Westmoor Drive, Suite #100
 Westminster, CO 80021
 USA
 +1-720-587-4700 Phone
 888-477-7516 (Toll Free in USA)
 www.spectraprecision.com

www.spectraprecision.com
 sales@spectraprecision.com
 support@spectraprecision.com

