

# FOCUS<sup>®</sup> 2 Total Station

**NEW**  
FOR 2015

## DISTANCE MEASUREMENT

Range with specified prisms (Good conditions<sup>1</sup>)

|                                     |   |
|-------------------------------------|---|
| Single Prism                        | 2.5m to 4,000m<br>(8.2 ft to 13,123 ft) |
| Reflectorless <sup>2</sup>          | 500 m (1,640 ft)                        |
| Shortest possible range             | 1.0m (3.3 ft)                           |
| Accuracy (Precise mode) ISO 17123-4 |   |
| Prism                               | ±(2+2 ppm × D) mm                       |
| Reflectorless <sup>5</sup>          | ±(3+2 ppm × D) mm                       |
| Measuring interval <sup>3</sup>     |   |
| Fine                                | 0.3 sec.                                |
| Normal                              | 0.2 sec.                                |

## ANGLE MEASUREMENT

Accuracy (ISO17123-3)

(horizontal and vertical) . . . . . 2"/0.6 mgon  
5"/1.5 mgon

Reading system . . . . . Absolute encoder

Circle diameter . . . . . 79 mm (3.1 in)

Horizontal/Vertical angle . . . . . Diametrical

Minimum increment

Degree . . . . . 1/5"

Gon. . . . . 0.2/1 mgon

MIL6400 . . . . . 0.005/0.02 mil

## TELESCOPE

|                                 |                   |
|---------------------------------|-------------------|
| Tube length                     | 154 mm (6.0 in.)  |
| Image                           | Erect             |
| Magnification                   | 30x               |
| Effective diameter of objective | 45 mm (1.8 in)    |
| EDM diameter                    | 50 mm (2.0 in)    |
| Field of view                   | 1°20'             |
| Resolving power                 | .3"               |
| Minimum focusing distance       | 1.0 m (3.3 ft)    |
| Laser pointer                   | Coaxial Red Light |

## TILT SENSOR

|                    |                           |
|--------------------|---------------------------|
| Type               | Dual-axis                 |
| Method             | Liquid-electric detection |
| Compensation range | ±3.0'                     |

## COMMUNICATIONS

|                     |                      |
|---------------------|----------------------|
| Communication ports | 1 x serial (RS-232C) |
| Data Interface      | SD Card, Mini-USB    |

## POWER

|                             |                  |
|-----------------------------|------------------|
| Internal NiMH battery (x2)  |                  |
| Output voltage              | 6.0 V DC         |
| Operating time <sup>4</sup> | approx. 13 hours |
| Charging time               |                  |
| Full charge                 | 4 hours          |

## GENERAL SPECIFICATIONS

Level vials

|                                    |  |
|------------------------------------|--|
| Sensitivity of Circular level vial | .8/2 mm  |
| Sensitivity of Plate level         | 30"/2mm  |
| Optical plummet                    |  |
| Image                              | Erect  |
| Magnification                      | 3x   |
| Field of view                      | 5°   |
| Focusing range                     | 0.3 m (1.0 ft) to ∞                                  |
| Display face 1 and face 2          | backlit, graphic LCD                                 |
| 160 x 90 pixels                    |  |
| Point memory                       | 10,000 records                                       |
| Dimensions                         |  |
| (W x D x H)                        | 160mm x 150mm x 340mm<br>(6.3 in x 5.9 in x 13.4 in) |
| Weight (approx.)                   | 5.1 kg (11.3 lb)                                     |
| Battery                            | 0.2 kg (0.5 lb)                                      |
| Carrying case                      | 3.2 kg (7.0 lb)                                      |

## ENVIRONMENTAL

|                             |   |
|-----------------------------|---|
| Operating temperature range | -20 °C to +50 °C<br>(-4 °F to +122 °F)                                    |
| Atmospheric correction      |   |
| Temperature range           | -40 °C to +60 °C<br>(-40 °F to +140 °F)                                   |
| Barometric pressure         | .400 mmHg to 999 mmHg/<br>533 hPa to 1,332 hPa/<br>15.8 inHg to 39.3 inHg |
| Dust and water protection   | .IP55   |

- 1 Good conditions (good visibility, overcast, twilight, underground, low ambient light).
- 2 Measuring distance may vary depending on targets and measuring conditions.
- 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 time may be shorter in low temperatures or if the battery is not new.
- 5 Accuracy 1.0 m to 5.0 m (3.3 ft to 16.4 ft) is ±8mm



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