



Trimble C3

MECHANICAL TOTAL STATION



KEY FEATURES

- ▶ Delivers the range of features law enforcement users want and the accuracy they need
- ▶ Reduces user fatigue even as it handles tough conditions at traffic and crime scenes
- ▶ Boosts productivity, saves time and makes data collection easier
- ▶ Autofocus powered by Nikon
- ▶ Powerful long range EDM
- ▶ Compact, lightweight and rugged system design
- ▶ Dual face displays
- ▶ Intuitive onboard software

Learn more: forensics.trimble.com



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DISTANCE MEASUREMENT

Range with specified prisms

Good conditions¹
 With reflector sheet 5 cm x 5 cm (2 in x 2 in) 1.5 m to 300 m
 With single prism 6.25 cm (2.5 in) 1.5 m to 5000 m

Reflectorless mode

	Good ¹	Normal ²	Difficult ³
KGC (18%)	400 m (1,312 ft)	300 m (984 ft)	235 m (771 ft)
KGC (90%)	800 m (2,625 ft)	500 m (1,640 ft)	250 m (820 ft)

Accuracy in precise measurement mode⁷

Prism⁴ ±(2+2 ppm × D) mm
 Reflectorless ±(3+2 ppm × D) mm

Measuring interval⁵

	Precise mode	Normal mode	Fast mode
Prism mode	1.0 s	0.5 s	0.3 s
Non-Prism mode	1.0 s	0.5 s	0.3 s
Least count	0.1 mm or 1 mm (0.0002 ft or 0.002 ft)	10 mm (0.02 ft)	10 mm (0.02 ft)

ANGLE MEASUREMENT

Accuracy (Standard Deviation based on ISO 17123-3) 1" (0.3 mgon), 2" (0.6 mgon), 3" (1.0 mgon), 5" (1.5 mgon)

Reading system Absolute encoder
 Circle diameter 62 mm (2.4 in)
 Horizontal/Vertical angle Diametrical / Single
 Minimum increment (Degree, Gon)
 1" model 0.5" (0.1 mgon)
 2", 3", 5" models 1.0" (0.2 mgon)

TELESCOPE

Tube length 125 mm (4.9 in)
 Image Erect
 Magnification 30x (19x/38x with optional eyepieces)
 Effective diameter of objective 45 mm (1.77 in)
 EDM Diameter 50 mm (1.97 in)
 Field of view 1° 25'
 Resolving power 3"
 Minimum focusing distance 1.5 m (4.9 ft)
 Laser Pointer Coaxial Red Light
 Tracklight No

TILT SENSOR

Type Dual-axis
 Method Liquid-electric detection
 Compensation range ±3'

COMMUNICATIONS

Communication ports 1 x serial (RS-232C), 1 x USB (host)
 Wireless communications Integrated Bluetooth[®]

POWER

Internal Li-ion battery (x2) 3.6 V
 Output voltage 3.6 V
 Operating time⁶
 Continuous angle-only measurement 22 h
 Distance / angle measurement / AF every 30 s 18 h
 Continuous distance / angle measurement 10 h

Charging time, full charge 6 h

GENERAL SPECIFICATIONS

Autofocus Yes
 Level vials
 Sensitivity of Circular level vial on tribrach 10' / 2 mm
 Tangent Clamps Yes
 Display face 1 back-lit, graphic LCD (128 x 64 pixels)
 Display face 2 back-lit, graphic LCD (128 x 64 pixels)
 Point memory 50,000 points
 Internal Plummet Optical or Class 2 Laser
 Optical Plummet:
 Magnification 3x
 Field of view 5°
 Minimum focusing distance 0.5 m
 Dimensions (W x D x H) 206 mm x 169 mm x 318 mm
 (8.1 in x 6.70 in x 12.5 in)
 Weight (approx.)
 1", 2", 3", 5" Main unit 4.3 kg (9.5 lb)
 Battery 0.1 kg (0.2 lb)
 Carrying case 3.3 kg (7.3 lb)

ENVIRONMENTAL

Operating temperature range -20 °C to +50 °C (-4 °F to +122 °F)
 Storage temperature range -25 °C to +60 °C (-22 °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, RCM Mark,
 IEC60825-1 am 2007, IEC60825-1 am 2014, FDA notice 50
 Prism/Reflectorless mode: Class 1 laser
 Laser Plummet/Laser Pointer: Class 2 laser

- 1 Good conditions (good visibility, overcast, twilight, low ambient light).
- 2 Normal conditions (normal visibility, object in the shadow, moderate ambient light).
- 3 Difficult conditions (haze, object in direct sunlight, high ambient light).
- 4 Standard Deviation based on ISO 17123-4
- 5 Measuring time may vary depending on measuring distance and conditions. Specification based on average of repeated measurements.
- 6 Battery life specification at 25 °C (77 °F). Operation times may vary depending on the condition and deterioration of the battery.
- 7 For both prism and non-prism modes, EDM accuracy in normal mode is ±(10+5 ppm × D) mm and fast mode is ±(20+5 ppm × D) mm.

Bluetooth type approvals are country specific.

Specifications subject to change without notice.



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