



# Trimble C5

## MECHANICAL TOTAL STATION

### THE EFFICIENT, ACCURATE WAY TO WORK

The new Trimble® C5 mechanical total station completes the industry's top portfolio with productivity-boosting, time-saving features that make fieldwork easier and faster.

The Trimble C5 is tough and reliable with a user-friendly design. It limits user fatigue even as it stands up to the toughest worksite conditions. On a wide range of projects, in diverse settings across the globe, the C5 is hard at work, quickly capturing accurate measurements and virtually eliminating downtime.

### Precise Autofocus. Superior Optics. Accurate Results.

The Trimble C5 offers the easy setup Trimble users have come to expect. The autofocus powered by Nikon enables the C5 to quickly and precisely focus on the anticipated distance, so users can simply sight, shoot and go. That means any day spent in the field can be highly productive. Superior Nikon optics give you crisp, bright sightings even in low light conditions. The results are always precise and true—which ensures greater productivity back in the office, too. There's no need to return to the field, because you get it right the first time.

### Tough, Durable and Easy to Use.

The Trimble C5 is lightweight and compact, facilitating ease of storage, transport and set up. It's also easy to carry when you're in the field. Users can work as long as they want without getting tired. The rugged construction means it also can handle whatever situation and wherever you take it. The C5 is built to deliver exceptional results, whatever the conditions. Count on it to perform to the highest standards, project after project, year after year.

### Cut Downtime. Improve Workflows.

Fully charged, the Trimble C5 batteries have enough power to last all day. And for the days that begin with half-charged batteries, they're hot-swappable. So there's no time wasted.

The Trimble C5 is compatible with Trimble's location-tracking technology, L2P. This brings simplicity to large fleet tracking, and peace of mind to fleets of one.

The new Trimble C5 has color touch screens supporting Trimble Access™ on board. The C5 is available in 1", 2", 3", and 5" accuracies. Whatever the task, it's equipped and ready to deliver the high level of efficiency and productivity—the improved workflows—you expect from Trimble.

## Key Features

- ▶ Autofocus enabling precise and fast focus
- ▶ Powerful long range EDM
- ▶ Dual color touchscreen displays
- ▶ L2P security location technology
- ▶ Compact, lightweight and rugged system design



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## DISTANCE MEASUREMENT

### Range with specified prisms

Good conditions<sup>1</sup>  
 With reflector sheet 5 cm x 5 cm ..... 1.5 m to 300 m  
 With single prism 6.25 cm ..... 1.5 m to 5000 m

### Reflectorless mode

	Good <sup>1</sup>	Normal <sup>2</sup>	Difficult <sup>3</sup>
KGC (18%)	400 m	300 m	235 m
KGC (90%)	800 m	500 m	250 m

### Accuracy in standard measurement mode<sup>7</sup>

Prism<sup>4</sup> ..... ±(2+2 ppm × D) mm  
 Reflectorless ..... ±(3+2 ppm × D) mm

### Measuring interval<sup>5</sup>

	Standard mode	Fast standard mode	Tracking mode
Prism mode	1.0 s	0.5 s	0.3 s
Reflectorless Mode	1.0 s	0.5 s	0.3 s

## 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  
 Horizontal/Vertical angle ..... Diametrical/ Single

## TELESCOPE

Tube length ..... 125 mm  
 Image ..... Erect  
 Magnification ..... 30x (19x/38x with optional eyepieces)  
 Effective diameter of objective ..... 45 mm  
 EDM Diameter ..... 50 mm  
 Field of view ..... 1° 25'  
 Resolving power ..... 3"  
 Minimum focusing distance ..... 1.5 m  
 Laser Pointer ..... Coaxial Red Light  
 Tracklight ..... Yes  
 Reticle Illumination ..... Yes, 4 steps

## TILT SENSOR

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

## 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 ..... 3.6 V  
 Operating time<sup>6</sup>  
 Continuous angle-only measurement ..... 14 h  
 Distance/ angle measurement/ AF every 30 s ..... 12 h  
 Continuous distance / angle measurement ..... 7 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 ..... LCD back-lit (640 x 480 pixel)  
 Display face 2 ..... LCD back-lit (640 x 480 pixel)  
 Operating system ..... Windows® Embedded Compact 7  
 Processor ..... Dual Core 800 MHz  
 Point memory ..... 512 MB RAM, 4 GB flash memory  
 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  
 Weight (approx.)  
 1", 2", 3", 5" Main unit ..... 4.3 kg  
 Battery ..... 0.1 kg  
 Carrying case ..... 3.3 kg

## ENVIRONMENTAL

Operating temperature range ..... -20 °C to +50 °C  
 Storage temperature range ..... -25 °C to +60 °C  
 Atmospheric correction  
 Temperature range ..... -40 °C to +60 °C  
 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. Operation times may vary depending on the condition and deterioration of the battery.
- 7 For both prism and reflectorless modes, EDM accuracy in fast standard mode is ±(10+5 ppm × D) mm and tracking mode is ±(20+5 ppm × D) mm.

Bluetooth type approvals are country specific.  
 Specifications subject to change without notice.



Contact your local Trimble Authorized Distribution Partner for more information

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