

CTS-112R TOTAL STATION

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CHCNAV

(+)**SURVEYING &** ENGINEERING

COST-EFFECTIVE EASY TO USE TOTAL STATION

The CTS-112R4 total station is based on proven technologies and designed for users who need the most cost-effective survey solution. It has an angle accuracy of 2" and integrates a high efficiency EDM to provide measurement range of 1000 m reflectorless and up to 5,000 m using a single prism, with millimeter accuracy.

Each replaceable battery provides 8 hours continuous working time, so you do not have to worry about losing power in the field anymore.

TOTAL STATION USE MADE EASY

Best-in-class industrial design with dual face keyboards and built-in laser plummet.

Dual face keyboards with buttons illumination to minimize mistakes provide optimum viewing and convenience under any environmental conditions. Built-in laser plummet allows quick instrument setup in all lighting conditions.

HIGH EDM PERFORMANCES

Up to 1000 m reflectorless measurement range. The CTS-112R4 is one of the fastest total stations in its class, with a distance measurement speed of 0.3 seconds. Reflectorless range is up to 1000 m and distance measurement to single prism is up to 5000 m.

INTUITIVE ONBOARD SOFTWARE

Bring productivity to any typical survey and construction projects.

The CTS-112R4 is a versatile, easy to use, rugged total station with a variety of advanced field applications software built-in to make your work more efficient.

EXTENDED MEMORY CAPACITY

Store up to 30,000 points in internal memory. Adding external SD card up to 32 GB will boost record capacity to 245,760,000 points.

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MAKE FIELD SURVEY EASY





SPECIFICATIONS

Distance measurement	
	Prism: Class 2
Laser output	Reflective sheet: Class 2
	Non-prism: Class 3R
Distance	Prism:5000 m
measurement	Reflective sheet: 1000 m
	Non-prism: 1000 m Prism:2 mm + 2 ppm
Accuracy	Reflective sheet: 3 mm + 2 ppm
Acouracy	Non-prism: 3 mm + 2 ppm $^{(1)}$
	Prism fine: 0.3 s
Measuring time	Prism tracking: 0.1 s
Laser type	Red visible laser
Carrier	0.650~0.690 µm
EDM type	Coaxial
Resolution	0.1 mm
Angle measurement	
Diameter	79 mm
Minimum readout	0.1"/1"/5"/10" optional
Accuracy	2"
Detection method	Horizontal: Dual / Vertical: Dual
Telescope	
Image	Erect
Tube length	154 mm
Objective lens	-
Objective lens effective	For telescoping: 45 mm
Objective lens effective aperture	For telescoping: 45 mm For measuring: 50 mm
Objective lens effective aperture Magnification	For telescoping: 45 mm For measuring: 50 mm 30
Objective lens effective aperture Magnification Field of view	For telescoping: 45 mm For measuring: 50 mm
Objective lens effective aperture Magnification	For telescoping: 45 mm For measuring: 50 mm 30
Objective lens effective aperture Magnification Field of view Minimum focus	For telescoping: 45 mm For measuring: 50 mm 30 1°30'
Objective lens effective aperture Magnification Field of view Minimum focus distance	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m
Objective lens effective aperture Magnification Field of view Minimum focus distance Resolving power Reticle illumination	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m 3"
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Objective lens effective aperture Magnification Field of view Minimum focus distance Resolving power Reticle illumination A System	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m 3" 4 brightness levels Cuto compensator Dual axis photoelectric detection
Objective lens effective aperture Magnification Field of view Minimum focus distance Resolving power Reticle illumination A System Working range	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m 3" 4 brightness levels Cuto compensator Dual axis photoelectric detection ± 3'
Objective lens effective aperture Magnification Field of view Minimum focus distance Resolving power Reticle illumination A System Working range	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m 3" 4 brightness levels Auto compensator Dual axis photoelectric detection ± 3' 1"
Objective lens effective aperture Magnification Field of view Minimum focus distance Resolving power Reticle illumination Asystem Working range Accuracy	For telescoping: 45 mm For measuring: 50 mm 30 1°30' 1.4 m 3" 4 brightness levels A br

Display	
Туре	LCD,6 lines digital screen
Keyboard	Alphanumeric, 28 keys with backlight
Control panel	Double
Screen size	2.8 inch
Communication	
Ports	Mini-USB, SD
Bluetooth ®	v 2.0
Interface and data recording	
Internal storage	4 MB (ready for 30,000 points)
External storage	Up to 32 GB (ready for 245,760,000 points)
Battery	
Battery type	Rechargeable lithium battery
Battery voltage	DC7.4 V 3,100 mAh
Operating time	Continuous distance/angle: 8 hours Continuous angle-only: 16 hours
Charging time	About 3 hours
Environment	
Operating temperature	-20°C to +50°C (-4°F to 122°F)
Dust and water proof	IP55
Size and weight	
Size	160 x 150 x 330 mm (6.3 x 5.9 x 13.0 in)
Weight	5.2 kg

*All specifications are subject to change without notice. (1)Object in shade, sky overcast, Kodak Gray Card (90% reflective).

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