



# 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.







## **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
	Non-prism: 3 mm + 2 ppm (1)
Magguring time	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
Α	ngle 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 effective	For telescoping: 45 mm
aperture	For measuring: 50 mm
Magnification	30
Field of view	1°30′
Minimum focus	4.4
distance	1.4 m
Resolving power	3"
Reticle illumination	4 brightness levels
Auto compensator	
System	Dual axis photoelectric detection
Working range	± 3′
Accuracy	1"
	Laser plummet
Accuracy	1.5 mm at 1.5 m instrument height
Laser spot size	2.5 mm

	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® (optional)	v 2.0
Interf	ace 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

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