

CRx

Robotic Total Stations



Minimize time spent; maximize accuracy and efficiency.

Advanced Technology

With a 5" touch screen, a more powerful processor for large files, automatic data backup, and the advanced positioning technology of STrEAM360, Carlson's super-reliable CRx robotic total stations provide the most efficient way to survey.

- X-MOTION™ Hybrid Drives
- Scout: Quickly search for passive prisms
- Full Connectivity
- Robust, field-proven package
- accXess™ EDM Technology
- 1", 2", 3", and 5" options

Made for Carlson SurvCE | SurvPC

The CRx series robotic total stations work flawlessly with SurvCE and SurvPC data collection software, and come with an integrated copy of SurvCE installed.

Focused on Productivity

The Carlson CRx series robotic total stations are quick to set up, and are packed with easy-to-use functions that simplify your surveying workflows and provide powerful tools to make you more efficient and more accurate.



BREAK NEW GROUND

Technical specifications:

Angle Measurements

Accuracy	1" (0.3 mgon), 2" (0.6 mgon), 3" (1.0 mgon), 5" (1.5 mgon)
Display resolution	0.1" (0.1 mgon)
Method	Absolute, continuous, diametrical
Compensation	Quadruple axis

Telescope

Magnification	30x
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Distance Measurements to Standard Prism Accuracy/Time (typical)

Single (fast)	2 mm + 1.5 ppm / 0.8 sec
Standard	1 mm + 1.5 ppm / 2.4 sec
Continuous	3 mm + 1.5 ppm / < 0.15 sec
Range	up to 3500 m

Distance Measurements – Reflectorless

Range	accXess5 / accXess10 500 m / 1000 m
Accuracy	2 mm + 2 ppm*
Time	typ. 2 - 6 sec
Precise capture	8 x 20 mm at 50 m

Interface

Keyboard	Full alphanumeric; 25 keys; illuminated (2 nd optional)
Display	5" WVGA 800 x 480 color and touch with LED backlight
Data recording	2 GB internal memory; removable SD card and USB stick
Ports	Serial; USB; internal Bluetooth®; long- range Bluetooth handle External power and WLAN
Operating system	Microsoft® Windows® EC 7.0

Motorisation

Technology	Hybrid Drives
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Scout - Opto-electronic prism search

Range	300m at round prism
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TRack - Automatic prism logging

Range	800 m at round prism
Max speed	90 km/h at 100 m

AIM - Automatic prism fine aiming

Range	1,000 m at round prism
Hz/V accuracy	1"
Technique	Image processing

NavLight™ - Alignment Aid

Range	5 m at 150 m
Accuracy	5 cm at 100 m

Physical Specifications

Weight	5.0 - 5.3 kg / 11 - 11.7 lbs (w/o battery and tribrach)
Operating / storage temperature	-20°C to 50°C / -40°C to +70°C
Protection class	IP55 dust and waterproof rating
Humidity	95%, non-condensing

Power Supply

Internal battery	Removable Li-Ion 4.4 Ah / 7.4 V
Operating time	Up to 8 h**

Plummet

Type	Laser point, adjustable brightness
Accuracy	1.5 mm at 1.5 m instrument height

* > 500 m: 4 mm + 2 ppm;

** Battery time may be shorter depending on conditions.

X-MOTION™ Hybrid Drives

CRx series instruments incorporate highly innovative X-motion hybrid drives, promoting up to 20% automation performance compared to conventional drives. It follows your target at 90 km/h at 100m distances.

Full Connectivity

The CRx series is made to meet all connectivity needs. Use its built-in Bluetooth® for medium range data transfer or its Bluetooth® handle for high performance Long-Range Bluetooth®. Either way, it is ideal for one-man robotic surveys.

Store data on the extra large internal memory, on the removable SD card or the USB stick using plug and play technology.

Robustness

The CRx series instruments are built to withstand the toughest conditions and designed and tested to be dust-proof and fully protected against water jets.

accXess™ EDM Technology

Get leading reflectorless measurements up to 500m with accXessEDM Technology. The extra small laser footprint and the sophisticated signal-processing technology ensure maximum accuracy - regardless of the distance or conditions.

NavLight™

Fitted as standard in the telescope, the NavLight is an efficient alignment aid, helping to speed up work while setting out. Its flashing red and yellow lights will guide you quickly and exactly to the line of sight.

STReAM360: Fully Robotic

Scout

Scans the entire working area within seconds to quickly find the target.

TRack

Continuously track targets. Once locked onto, the instrument remains accurately aimed on the moving target.

AiM

The telescope is accurately aimed at any prism, without needing to look through the telescope. Measurements are performed automatically with consistently high and repeatable dependability.



Distance meter (Prism Mode): Laser class 1 in accordance with IEC 60825-1 resp. EN 60825-1; Laser plummet: Laser class 2 in accordance with IEC 60825-1 resp. EN 60825-1



Distance meter (Non-Prism Mode accXess): Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1

