

The Carlson CR+ Series

Angular Accuracy
2", 5"

Scout360
Reflector Scan

TRack360
Reflector Tracking

AiM360
Auto-Targeting

Removable Memory
USB Stick and SD Card

SD 

Microsoft Windows CE

Allows 3rd party
Software packages
To run onboard

Light weight

Laser Plummet

Long Range Bluetooth
Data Link 

 **NavLight**

 **STReAM360**

1 GB Internal Memory

1,000m
Reflectorless

10,000m to prism
1mm + 1.5ppm

 hybrid drives
XMOTION

Long life battery 7-10h

Full 2nd keyboard option

IP55 Water & Dustproof

Full VGA,
High Resolution,
Color & Touch Display

Illuminated Keys

Features

Advanced Technology

The advanced positioning technology of STReAM360, X-motion hybrid drives & accXess EDM Technology incorporated in Carlson's super reliable CR+ series robotic total stations provides the most efficient way to survey. Carlson works for you.

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.

Robustness

The CR+ 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 1000m with accXessEDM Technology. The extra small laser footprint and the sophisticated signal-processing technology ensure maximum accuracy – regardless of the distance or conditions.

X-MOTION™ Hybrid Drives

The CR+ series incorporates 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 Carlson CR1+, CR2+, and CR5+ are 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.

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.

Made for Carlson SurvCE

Get all you need for your daily work with Carlson SurvCE data collection software on the Carlson Carlson CR1+, CR2+, CR5+ robotic total stations – these instruments are quick to set up and have easy-to-use functions that simplify the entire process even more.

Technical Specifications

Angle Measurements	Accuracy Method Compensation Display resolution	1" (0.3 mgon), 2" (0.6 mgon), 5" (1.5 mgon) Absolute, continuous, diametrical Quadruple axis 0.1" (0.1 mgon)
Telescope	Magnification	30x
Distance Measurements	Prism Range Accuracy Time Reflectorless Range Accuracy Time Precise capture	Standard mode: 3500 m / 1 mm + 1.5 ppm / typ. 0.8sec* Long mode: >10,000 m / 5 mm + 2 ppm / typ. 2.5sec accXess10 1000m, 2 mm + 2 ppm**, typ. 3sec, 8×20 mm at 50 m
Motorization	Technology	Hybrid Drives
Scout	Range	300m at round prism
TRack	Range Max speed	800 m at round prism 90 km / h at 100 m
AIM	Range Hz/V accuracy Technique	1000 m at round prism 1" Image processing
NavLight™	Range Accuracy	5 m at 150 m 5 cm at 150 m
Interface	Keyboard Display Data recording Ports Operating system	Two full alphanumeric; 35 keys; illuminated (2nd optional) Full VGA 640 x 480 color and touch with LED backlight 1 GB internal memory; removable SD card and USB stick Serial; USB; internal Bluetooth; long- range Bluetooth handle and external power Microsoft Windows CE 6.0
Plummet	Type Accuracy	Laser point, adjustable brightness 1.5 mm at 1.5 m instrument height
Physical Specifications	Weight Operating / storage temperature Protection class Humidity	5.0 – 5.3 kg (w/o battery and tribrach) –20°C to 50°C / -40°C to +70°C IP55 dust and waterproof rating 95%, non-condensing
Power Supply	Internal battery Operating time	Removable Li-Ion 4.4 Ah / 7.4 V 7-10 h***

* Fast mode; ** > 500 m: 4 mm + 2 ppm; *** Single measurement every 30 second at 25° C. Battery time may be shorter depending on conditions. Distance meter (reflector 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 (reflectorless mode): Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1.