SPECIFICATIONS

Model		CR-P1 S	CR-P1 M	CR-P1 L
Scanning Range	White, 90% Reflectivity	0.5 to 100 m	0.5 to 200 m	0.5 to 400 m
	Dark-grey, 10% Reflectivity	0.5 to 100 m	0.5 to 150 m	0.5 to 150 m
	Black, 2% Reflectivity	0.5 to 50 m	0.5 to 50 m	0.5 to 50 m
Ranging noise*1*2	White, 90% Reflectivity	0.1 mm @ 10 m, 0.2 mm @ 25 m		
	Dark-grey, 10% Reflectivity	0.3 mm @ 10 m, 0.4 mm @ 25 m		
	Black, 2% Reflectivity	0.7 mm @ 10 m, 1.2 mm @ 25 m		
Max speed		Up to 2 MPts/sec		
3D accuracy*3		2mm@10 m, 3.5mm@25 m		
Ranging error*4		±1 mm		
Angular accuracy*5		19 arcsec		
Camera	HDR camera	13 MPx - 2x, 3x, 5x brackets		
	Parallax	Minimized due to co-axial design		
Laser	Laser class	Laser class 1		
General	Power supply	19 V (external supply), 14.4 V (internal battery)		
	Typical power consumption	19 W idle, 32 W scanning, 72 W charging		
	Typical battery operation time	About 4 hours		
	Ingress Protection (IP) rating class	54		
	Weight	4.4 kg (including battery)		
	Size/Dimensions	230 x 283 x 103 mm		
Others	Dual axis compensator	Performs a leveling of each scan with an accuracy of 19 arcsec valid within ±2°		
	Accessory bay	Compatible with RICOH THETA Z1 (camera mount included only with CR-P1 L)		

*1 Ranging noise is defined as the variation of distance samples from repeated measurements of a single point at 122k Pts/sec
*2 Some surfaces can lead to additional noise
*3 For distances larger 25 m add 0.1 mm/m of uncertainty
*4 Ranging error is defined as a systematic measurement error at around 10 m and 25 m
*5 It is recommended to perform on-site compensation in the event the unit is exposed to exceptional temperature or mechanical stress

Standard Equipment

- Main unit
- Battery charger
- Power supply unit
- Battery
- Scanner transport and carrying case
- Mirror cleaning liquid for optics
- SD card reader (An SD card is already inserted in the scanner.)
- Status indicator
- 4 mm hex key
- Quick release
- Quick start guide
- AC power cable

Optional Accessores

- PanoCam adapter (The CR-P1 L also includes)
- Battery charger
- Power supply unit
- Battery
- Thermal cover
- Carbon fiber tripod
- Sphere set (M/L)

TOPCON CORPORATION
75-1 Hasunuma-cho, Itabashi-ku, Tokyo 174-8580, Japan
www.topcon.co.jp

<Contact to>
TOPCON POSITIONING ASIA (MALAYSIA) SDN. BHD.
Registration No. 201901043929 (1353259-V)
No. 6, Jalan Pensyarah U1/28,
Hicom-Glenmarie Industrial Park,
40150 Shah Alam, Selangor Darul Ehsan
Email: mys_survey_sales@topcon.com
https://www.topconpositioning.asia/sa/en

- Specifications may vary by region and are subject to change without notice.
- Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Topcon is under license.
- Other trademarks and trade names are those of their respective owners.

Your local Authorized Dealer is:

CR-P1

CR-P1 series

3D Laser Scanner

New top-of-the-line model with improved point density and speed

Up to 2 million points per second. Scanning speed approximately 16 times faster than conventional models.

- High speed, high density, high accuracy
- Up to 400 m scanning range
- High performance in a lightweight 4.4 kg body
- Two different processing Software:
  - On-Field Registration: Collage Site
  - Office Solution: Collage Office
- Choose between different camera sensors
- Real-Time scanning status indicators

One scanner for multiple job sites with high-level specifications!

It supports both cloud to cloud and resection, making it easy to use in different areas

High speed, high density, high accuracy

This top-of-the-line model offers high speed and high density while maintaining the long range and high accuracy of conventional models. With up to 2 million points per second, the scanner offers a scan speed approximately 16 times that of conventional models.

High performance in a lightweight 4.4 kg body

Despite its high performance, the compact and lightweight body (4.4 kg) and the quick-release mechanism that allows easy attachment and detachment from the tripod providing excellent mobility. Even in environments where frequent repositioning is required, shifting the scanner is quick and easy.

Choose between camera sensors

Choose from a built-in camera for colorizing the pointcloud or an external panoramic camera for speed.
The measurement time for an external camera is just 2 seconds!

Up to 400 m scanning

Wide-area measurements can be performed in one scan with scanning range of up to 400 m.
It can also reliably scan high-altitude targets such as tall buildings and high-voltage power lines.

Choose from two different processing software Collage Site/Collage Office

Collage Site allows you to complete work fully on-site, while Collage Office enables a wide variety of analysis in the office, including high-density clouds. Choose any of these two processing styles to suit your work.

Real-Time scanning status indicators

The system provides real-time status feedback during scanning and image capture through visual and auditory indicators. This allows operators to monitor device activity even during remote operation, ensuring reliable and confident measurement workflows.

Choose between two processing styles

On-Site Package | On-site data review | High-accuracy cloud to cloud | On-Site cloud generation and flatness check.

Field scanning control and processing software

Collage Site + CR-P1

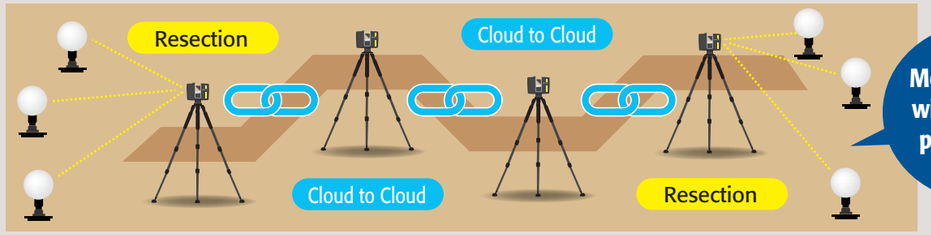
Cloud generation and flatness can also be checked while on site

"Collage Site" enables a fully on-site workflow—from remote operation of the CR-P1 and 3D point cloud acquisition to data analysis and export—all completed directly in the field. By combining point cloud matching with resection methods, it delivers both high accuracy and operational efficiency. Additionally, with new functionality that visualizes flatness based on elevation differences, users can achieve more precise measurements and reduce rework, supporting faster and more reliable field operations.

Configuration

CR-P1 + High-performance tablet + Collage Site

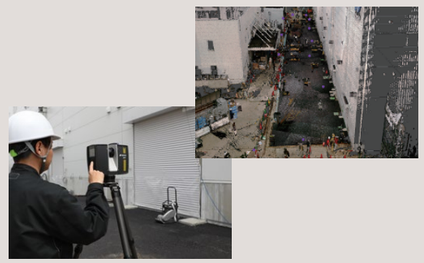
Combination of resection and cloud to cloud



Fast and detailed analysis | High-density data analysis | Fast analysis | Integration with other cloud data

3D Point Cloud Processing Software

Collage + CR-P1



Easy post-processing of high-density, data

With the high-speed, high-density capabilities of the CR-P1, even fine surface details can be captured with precision. Ultra-dense pointcloud will increase processing load, however Collage Office enables fast analysis. This applies to even in high demanding environments like ICT pavement construction where full utilization of dense point clouds is essential. This workflow allows scanning to be completed quickly on-site, with detailed analysis handled in post-processing. Additionally, by leveraging Collage Office's core feature—merging point cloud data from multiple sensors—you can generate highly detailed, gap-free datasets, ensuring accuracy and minimizing rework.

Configuration

CR-P1 + High-performance PC + Collage Office