

SPECIFICATIONS

GENERAL		
Absolute coordinates accuracy ^{*1}	50mm@10m distance (1 sigma)	^{*1} Comparison to 10 known points in 30 times by 30km/h
Surface accuracy ^{*2}	10mm on road surface (1 sigma)	^{*2} Plane fitting results on flat road surface
Timing box		
Dimensions	260 (W) x 160 (D) x 121 (H) mm	
Weight	3.0Kg	
Dustproof / Waterproof	IP65	
Input Voltage	9V-36V	
Cube		
Dimensions	300 (W) x 500 (D) x 600 (H) mm	
Weight	18.0 Kg (including all sensors)	
GNSS Receiver		
Number of channel	226 channel	
GPS	L1 / L2 carrier, L1CA, L1P, L2P	
GLONASS	L1 / L2 carrier, L1CA, L1P, L2P	
Data update	10Hz	
Static survey accuracy	H : ±3.0mm +0.5mm / V : ±3.0mm +0.5mm	
Kinematic survey accuracy	H : ±10mm +1ppm / V : ±15mm +1ppm	
Dustproof / Waterproof	IP67	
IMU		
Gyro bias stability	1° / hr	
Acceleration bias stability	7.5 mg	
Laser scanner		
Point density	700000 points / sec	
Valid range	100m	
Dustproof / Waterproof	IP67	
Spherical camera		
Camera unit	CCD camera (6 pcs)	
Maximum resolution	8000 x 4000 pixel	
Maximum image capturing speed	10 fps	
Wheel encoder		
Pulse rate	2500 PPR	
Dustproof / Waterproof	IP67	

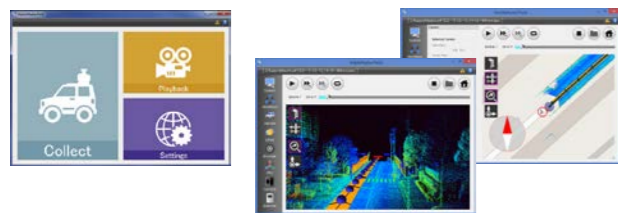
High-speed and more automated post-processing software



Mobile Master Field (MMF) software

The MMF software monitors and controls IP-S3 data acquisition with simple operation.

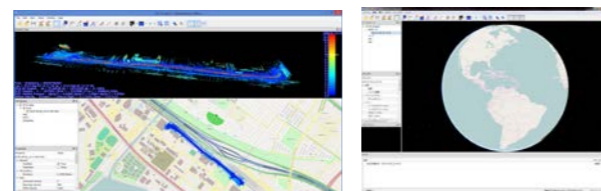
- With intuitive menus, operation in the cockpit is stress-free.
- Status of all connected sensors can be monitored in real time.
- The included Play Back function to preview the acquired data along with the driven route to check, before going back to the office, if all the necessary area has been measured and data are captured.



Mobile Master Office (MMO) software

The MMO software is the post-processing software for PC's which provides intuitive and speedy data processing and analysis with a new processing engine.

- Capable to quickly display a large volume of point cloud data and provide smooth operation for data processing and analysis.
- Improved accuracy of car position and trajectory with the enhanced processing engine.



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Your local Authorized Topcon dealer is:

IP-S3 HD1

Mobile Mapping System



Superior performance for collecting high-density point clouds in a compact and light weight body

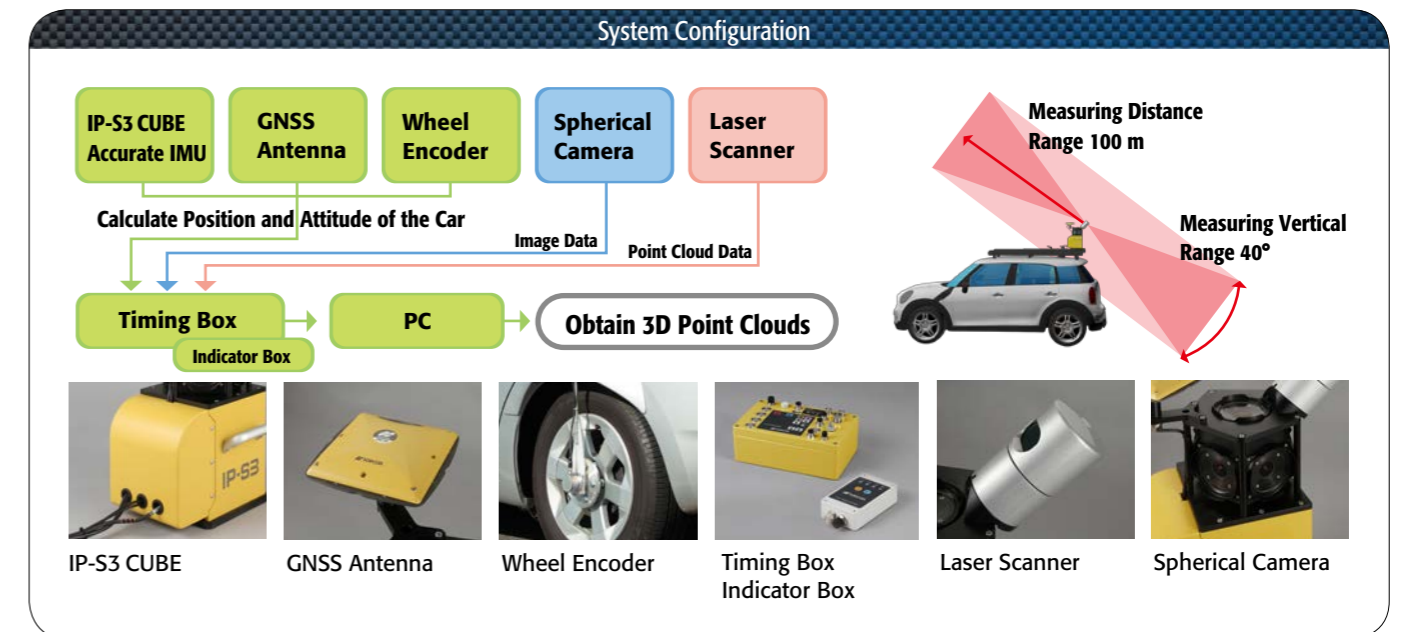
- Easy mounting setup
- Ultra-compact and lightweight design
- High-speed and high-density point cloud acquisition
- Portable carrying case ensures security
- Efficient for mapping and GIS data updating
- World's first Play Back function to check and review the acquired data

Efficiently collect massive spatial data with high-density 3D Point clouds data over a large area.



IP-S3 HD1

Position, image and point cloud data all are collectively acquired



Highly effective to obtain 3D spatial information in shorter time and in lower cost.



Ultra-compact, lightweight

The IP-S3, in a twice as compact design as its predecessor, enables mounting and set up even on a small car which can drive relatively narrow street. Only one person is required to mount and dismount the system on to and from a car roof.



Acquire high-density point cloud data

IP-S3 obtains high-quality data. High-speed scanning of 700,000 points-per-second provides detailed shapes of objects along the driving route. Six 5 MP cameras, capture the high-resolution image data of 360 degrees around the car.



Instant preview of acquired data

Play back function to view the data along with the driving route, just after completing the session. This ensure if the data covers what are necessary to acquire, before return to the office.

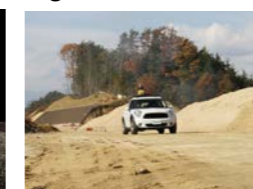


Portable carrying case for easy transport and secure storage

A portable carrying case is provided to protect the system for transportation and storage. It can be easily taken to a secure area to avoid damage or theft during overnight trips.

3D point cloud data can be utilized for a variety of applications

Topo measurement at civil engineering site



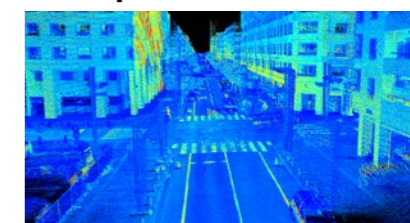
Topographic Mapping



Investigation at Steep slope surface



Landscape Simulation

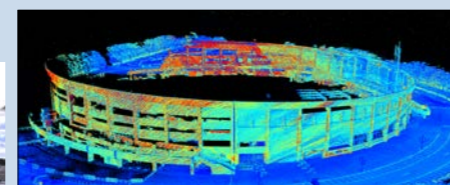


Measurement



Drive through the area that need to be measured

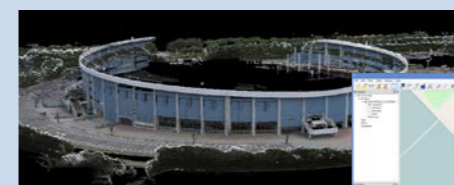
Acquired Data



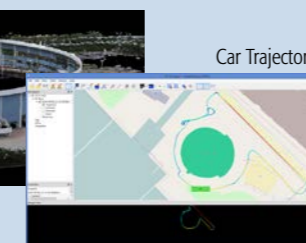
Point cloud data (before texture mapping)

Omnidirectional Image

Post Processing



Point cloud data (after texture mapping)



Car Trajectory

Different Applications



Road Signs/White Line



Create base map for 3D GIS