

SPECIFICATIONS

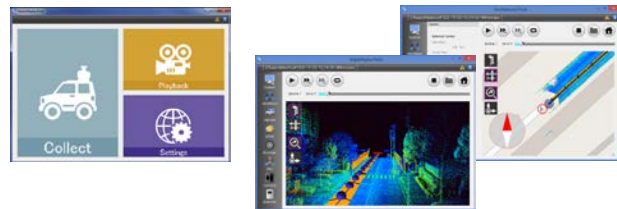
<b>Timing box</b>	
Dimensions	260 (W) x 160 (D) x 121 (H) mm
Weight	3.0Kg
Dustproof / Waterproof	IP65
Input Voltage	9V-36V
<b>Cube</b>	
Dimensions	300 (W) x 500 (D) x 600 (H) mm
Weight	18.0 Kg (including all sensors)
<b>GNSS Receiver</b>	
Number of channel	226 channel
GPS	L1 / L2 carrier, L1CA, L1P, 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
<b>IMU</b>	
Gyro bias stability	1° / hr
Acceleration bias stability	7.5 mg
<b>Laser scanner</b>	
Point density	700000 points / sec
Valid range	100m
Dustproof / Waterproof	IP67
<b>Spherical camera</b>	
Camera unit	CCD camera (6 pcs)
Maximum resolution	8000 x 4000 pixel
Maximum image capturing speed	10 fps
<b>Wheel encoder</b>	
Pulse rate	2500 PPR
Dustproof / Waterproof	IP67

High-speed and more automated post-processing software



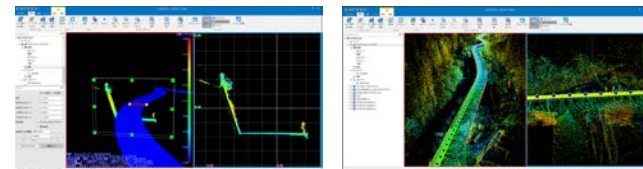
**Mobile Master Field (MMF) software**  
The MMF software monitors and controls IP-S3 data acquisition with simple operation.

- 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.



**MAGNET™ Collage**  
Change Seamless Site to 3D with Point Cloud Integration! MAGNET Collage is Post Processing Software on office PC.

- Fast Processing 3D Mass Data
- Easy to use with Slice (Cross Section) View
- Integrate MMS point cloud data with the one generated from Laser Scanner or UAV.



**MAGNET™ Collage Web 3D Mass Data Viewer (Optional)**

MAGNET™ Collage Web is the web application to view point cloud mass data via the web browser. It can show slice view, measure a distance and calculate an area so you can check more detail information.

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3D Mass Data  
Software Solution  
MAGNET Collage Compliant!



**IP-S3 HD1**  
Mobile Mapping System



**MAGNET™ Collage Web**

View 3D Mass Data Quickly on Web Browser!

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

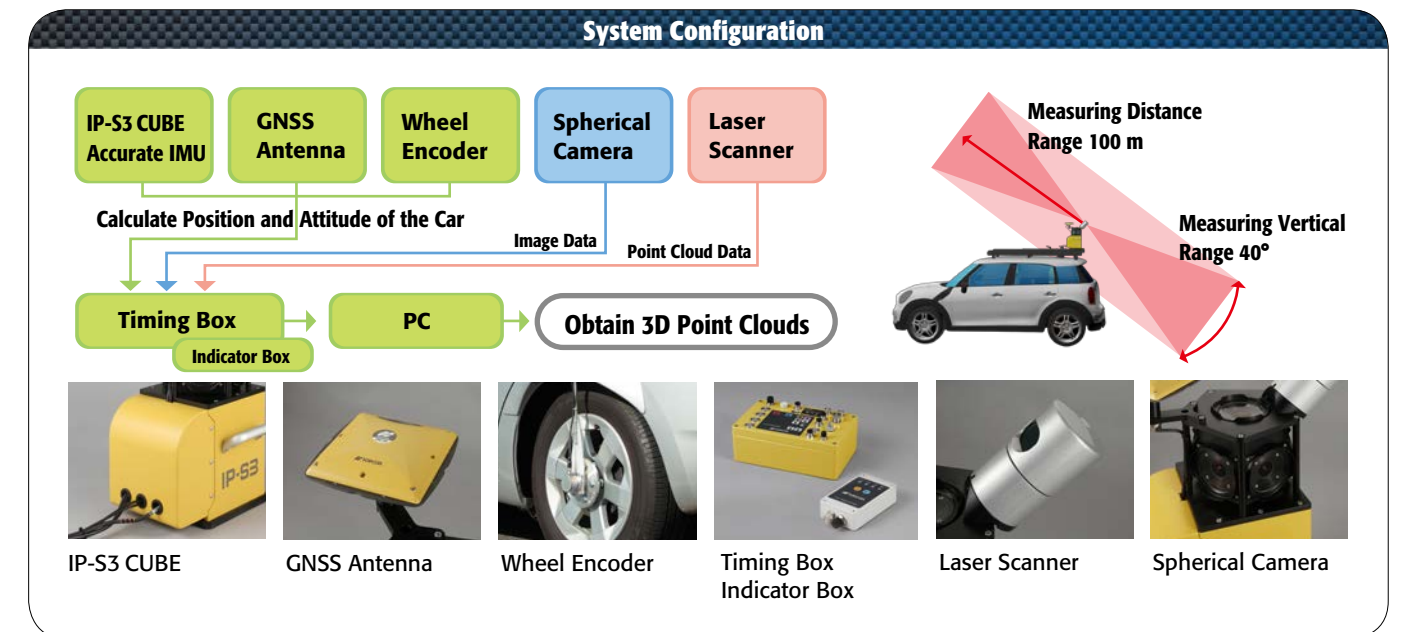


# Efficiently collect massive spatial data with high-density 3D Point clouds data over a large area.



# 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

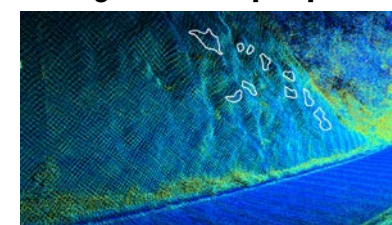
### Topo measurement at civil engineering site



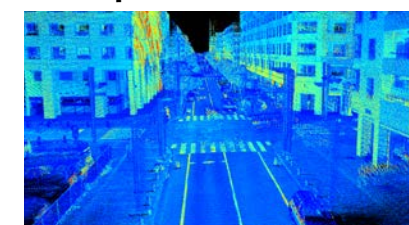
### Topographic Mapping



### Investigation at Steep slope surface



### Landscape Simulation

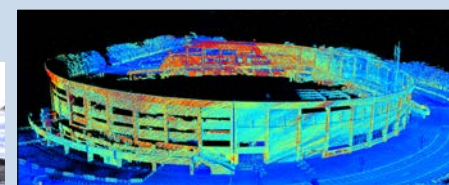


## Measurement



Drive through the area that need to be measured

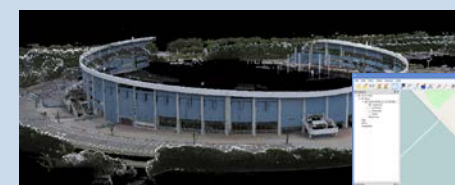
## Acquired Data



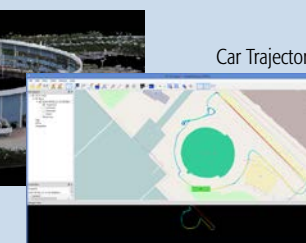
Point cloud data (before texture mapping)

Omnidirectional Image

## Processing Post



Point cloud data (after texture mapping)



Car Trajectory

## Different Applications



Road Signs/White Line



Create base map for 3D GIS