

## MS-C Series 360° 3D Mapping LiDAR



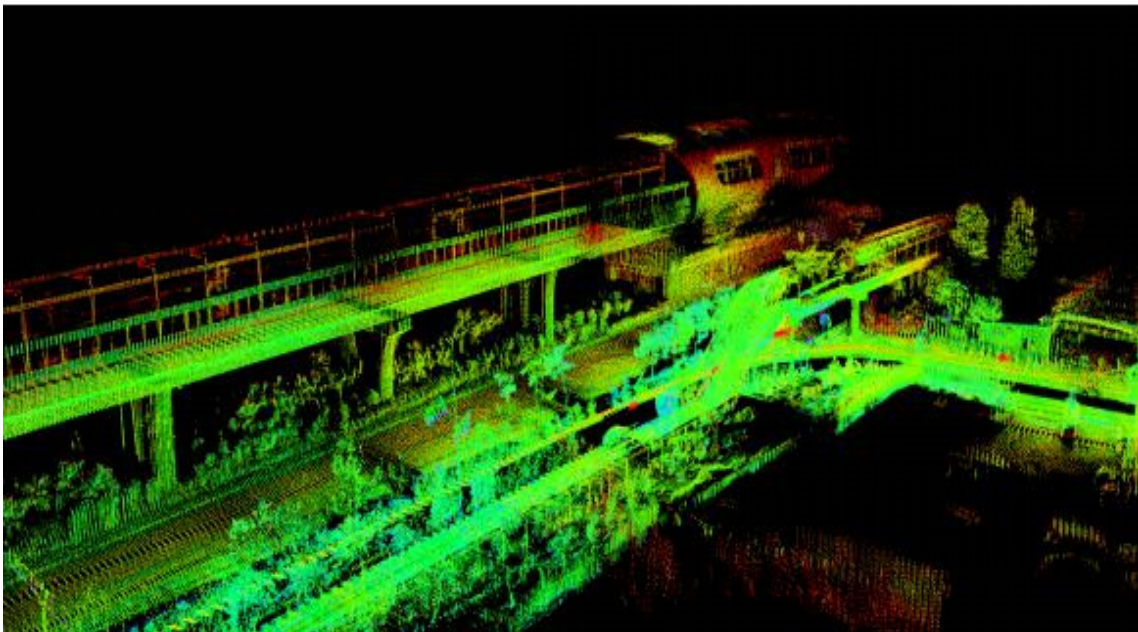
### Abstract

MS-C is a high-performance 360° 3D mapping LiDAR. It has two types: 32-line & 16-line. Through the scan of 32-line & 16-line laser at 360° FOV to achieve 3D detection and imaging, accurately obtaining the surrounding environment information. Detection distance is up to 200m and measurement accuracy  $\pm 3\text{cm}$ . Widely used in high-precision maps, smart cities, 3D modeling of cities, land surveys, fire emergency, power line inspection, mine/ tunnel detection, etc.

### Features

- High point density, dual echo generating about 1.28 million 3D point cloud coordinates per second
- Wide field of view, with 360° horizontal FOV and 32° vertical FOV
- Lightest weight only 840g for MS-C16

### RTK-SLAM



## Specifications

| Model                        |               | MS-C32                                    | MS-C16          |
|------------------------------|---------------|---|-----------------|
| Channel                      |               | 32  | 16              |
| Measurement Technique        |               | Time of Flight (TOF)                      |                 |
| Wavelength                   |               | 905nm                                     |                 |
| Laser Product Classification |               | Class 1 Eye-safe/ IEC 60825-1:2007 & 2014 |                 |
| Measurement Range            |               | 200m                                      |                 |
| Ranging Accuracy             |               | ±3cm                                      |                 |
| Data Points Generated        | Single Return | 640,000 point/s                           | 320,000 point/s |
|                              | Dual return   | 1,280,000 point/s                         | 640,000 point/s |
| Rotation Rate                |               | 5Hz , 10Hz , 20Hz                         |                 |
| Echo times                   |               | 2   |                 |
| Field of View (FOV)          | Horizontal    | 360°                                      |                 |
|                              | Vertical      | -16°~ 15°                                 | -15°~ 15°       |
| Angular Resolution           | Horizontal    | 5Hz: 0.09° / 10Hz: 0.18° / 20Hz: 0.36°    |                 |
|                              | Vertical      | 1°  | 2°              |
| Operating Voltage            |               | 9V~ 36VDC                                 |                 |
| Operating Temperature        |               | -20°C ~ 60°C ( Customized up to -40°C )   |                 |
| Communication Interface      |               | 1000M Ethernet , PPS                      |                 |
| Shock Test                   |               | 500m/sec <sup>2</sup> , last11ms          |                 |
| Vibration                    |               | 5Hz-2000Hz , 3G rms                       |                 |
| IP                           |               | IP 67                                     |                 |
| Dimension ( D-H )            |               | Φ 120*110mm                               | Φ102*78mm       |
| Weight                       |               | 1200g                                     | 650g            |