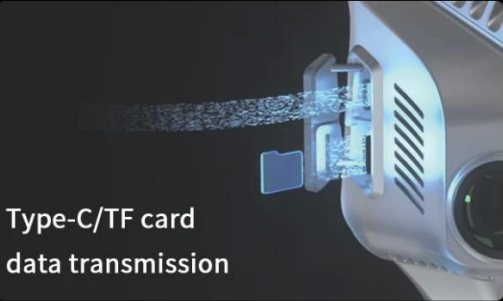


3D Lidar Scanner Share Slam S20

Detailed Overview

	Integrated lightweight body	 Type-C fast charging	 Bluetooth + WiFi6 One-touch connection
		 Operation time up to 150 minutes	 Newly upgraded RTK antenna
Quick- dismantle battery handle	 Centering Rod new reinforced connection kit	 Standard upgraded positioning board for GCP	



One-Inch Large-Format Image Sensor

Equipped with dual one-inch large-format CMOS sensors, featuring 2.4μm pixel size and 16 effective megapixels per lens. This configuration delivers enhanced photo clarity and more accurate and clear point cloud colorization.



Precise Colorized Point Cloud

Featuring microsecond-level system-wide hardware time synchronization, this results in highly accurate point cloud data. It ensures seamless integration of color and intensity point clouds.



Professional-Grade Mechanical Shutter

The mechanical shutter enables global exposure without jelly effect. This ensures more accurate colorful point cloud colorization and makes the photos highly suitable for nap-of-the-object photogrammetry modeling.



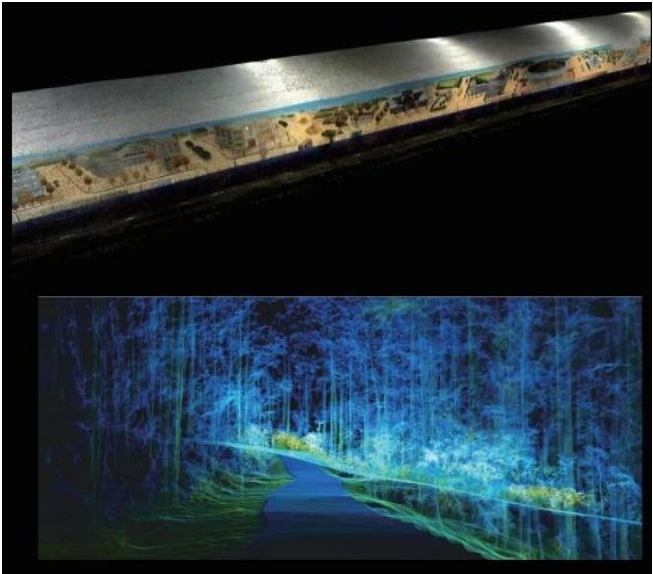
Open Hardware Interfaces

Open hardware interfaces enable cross-platform collaboration. Open SDK supports device communication, data transfer and operational control, ideal for new surveying equipment (e.g., embodied intelligence systems).



Optimized for Post-Processing Workflows

Point cloud data integrates seamlessly into BIM/CAD workflows. Leveraging high-accuracy point cloud data enables efficient mapping and modeling.



Powered by Proprietary Algorithms

[SLAM RTK lidar scanner factory direct from China](#). The system delivers robust performance with SHAR's proprietary LiDAR SLAM and Visual SLAM algorithms. This enhances real-time point cloud density and colorization effects, making it adaptable to diverse complex scenarios.



Photos Support 3DGS Modeling

Benefiting from the one-inch large-format camera and combined with image pose metadata technology, the photos are clear with uniform color. This makes them better suited for 3D Gaussian Splatting model generation.



Supports Mesh Model Generation

Raw data is fully accessible to software developers, allowing them to process the data using their own SLAM algorithms. The photos can be used for Mesh models, meeting the data processing needs across various industries.

Specifications

Physical Parameter	
Weight	1,07 kg (con batería)
Battery	14,8V 3150 mAh
Duration	150 minutos
Charge	USB-C 30W (Fast Charging)

Storage	256 Gb (SD card)
Level of protection	IP54
Working temperature	-20 °C-55 °C
Transport platform	Manual
Working modes	Pure SLAM, Checkpoints and RTK
Laser Unit	
Detection range	40m@10%, Maximum range 70m
Relative accuracy	1 cm
Absolute precision	5 cm
LiDAR FOV	H: 360° - V: 52° H: 360° - V: 52° H: 360° - V: 52°
LiDAR class	Class 1
Point rates	200,000 points/sec
GNSS Unit (POS)	
RTK	Integrated
RTK accuracy	H: 0,8cm + 1ppm - V: 1,5cm + 1ppm
Camera	
Number of camera	2
Resolving power	Total 24 million pixels
Single camera resolution rate	12 million images
Photo field of view angle	360°*270°
Photo format	.png
Data and software	
Point thickness	Within 1cm
Processing method	Real time solution/ post solution
Absolute accuracy	Better than 5cm
Relative accuracy	Better than 1cm
Point cloud format	Common formats such as .las, pcd,ply, etc
Point cloud	Support previewing colored point clouds
Mobile software	Supports IOS and Android
Desktop software	Supports one click output of color point clouds
Built point cloud browsing	Support point cloud and image space association vie