YHS12C(A)

Intrinsically safe 3D laser scanner for mining

MA MFA230136   Ex ib I Mb

The YHS12C (A) intrinsically safe 3D laser scanner for mining is suitable for hazardous working environments such as ground and various types of gas mines. It is designed with intrinsically safe explosion-proof technology and has a "MA" certification. The explosion-proof mark is Ex ib I Mb. It adopts innovative integrated structural design, make it easy to operate, stable, and reliable, with range and measurement accuracy reaching industry level. With Feima Robotics's fully independent intellectual property post-processing software, UAVManager Professional Edition (Surveying Edition), it can produce high-definition and high-precision color point clouds and local panoramic images, while supporting point cloud viewing and optimization processing, providing efficient solutions for mining and mine surveying.

Integration

Integrated structural design of machine body and battery, for easier operation.

Long endurance

Integrated independent power supply, with an ultra long 4-hours endurance.

High reliability

IP54 protection level, sturdy and durable.

Long scanning range

120m measurement distance to meet the requirements of underground space application.

High precision

Industry level SLAM post-processing algorithm for obtaining high-precision 3D point cloud data.

Product parameters

Lidar FOV	270° × 360°
Camera FOV	200°(H)×100°(V)
Relative accuracy	2 cm
Absolute accuracy	5 cm
Storage	Standard 32G (supports 256 GB and above C10 speed)
Power supply	Internal power supply
Internal battery	8000 mAh × 3
Operation time	4 h
Dust & humidity protection	IP54
Working temperature	0℃ ~ 40℃
Weight	2.3 kg
Size	411 mm × 268 mm × 132 mm (Including base)
Certification type	Mining intrinsic safety type

Sensor parameters

Laser class	Class 1
Laser channels	16
Maximum measuring distance	120 m
Point measurement rate	320 kpts/s
Echo intensity	8 bits
Number of cameras	3
Camera resolution	5 MP
NFC	Support

Main tunnel

Tunnel model

Internal details of the tunnel

Coal inventory