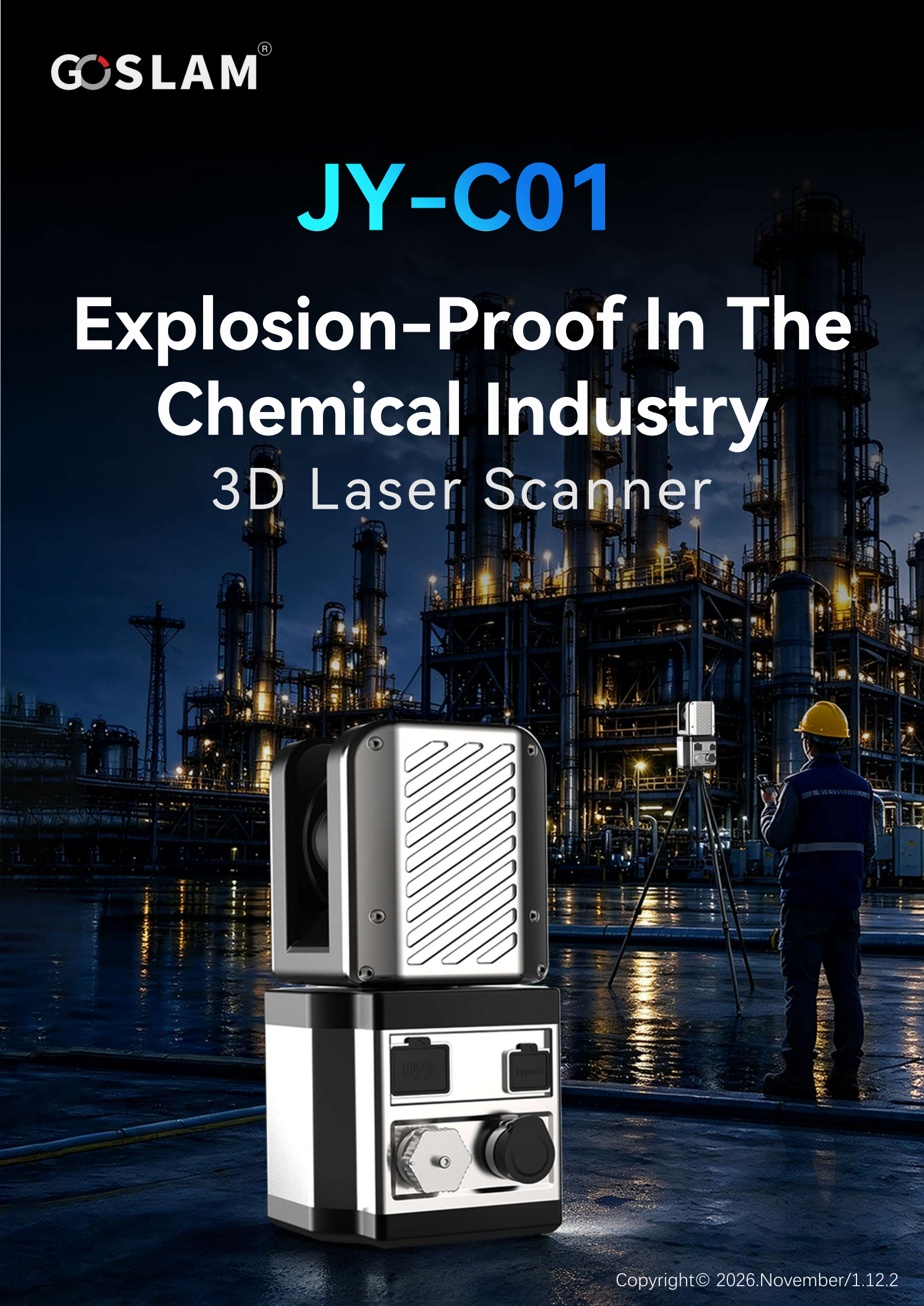
GOSLAM®

JY-C01

Explosion-Proof In The Chemical Industry

3D Laser Scanner



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JY-C01 Multifunctional Explosion-Proof Laser Scanner

Supports dual-mode scanning:

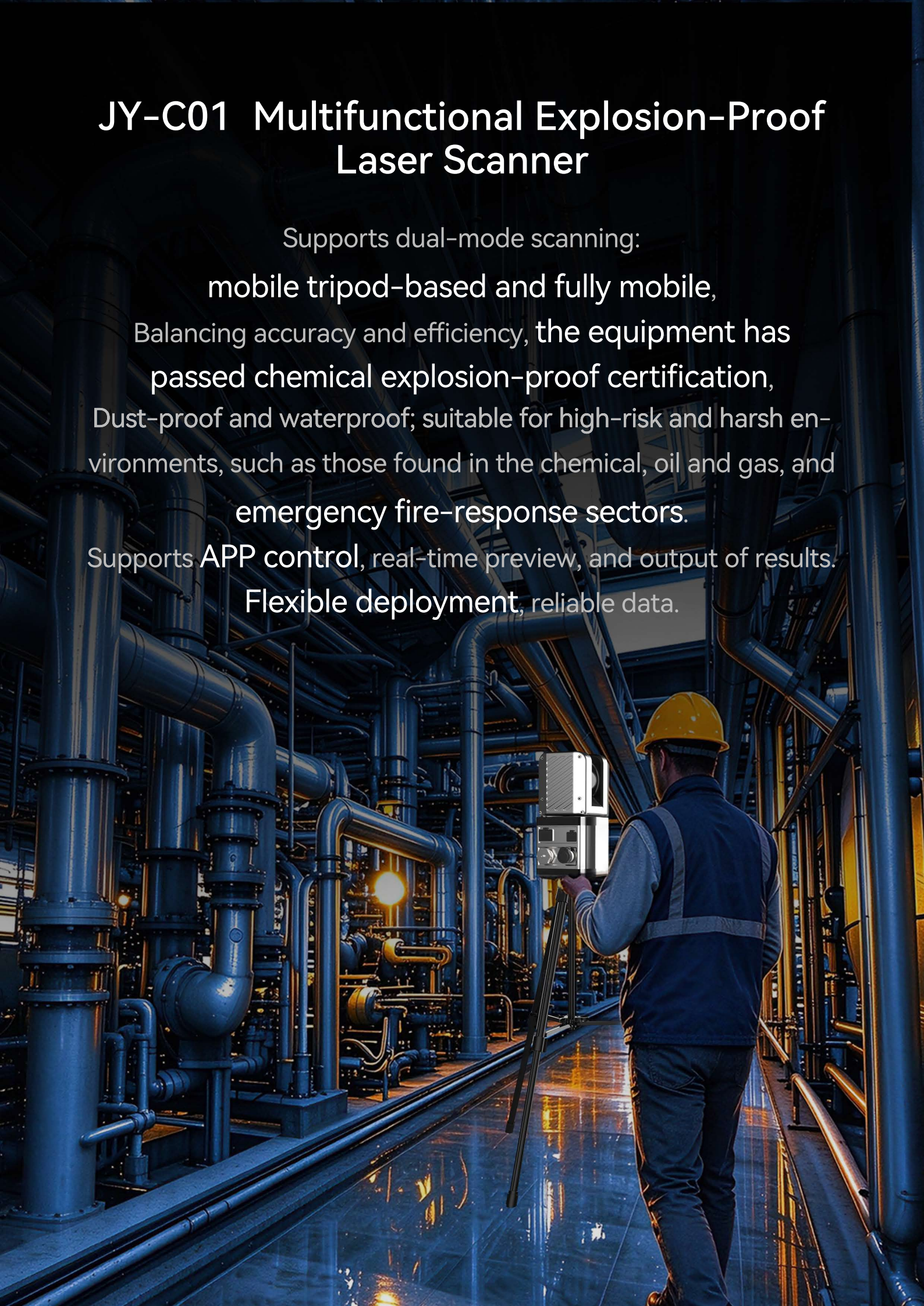
mobile tripod-based and fully mobile,

Balancing accuracy and efficiency, the equipment has passed chemical explosion-proof certification,

Dust-proof and waterproof; suitable for high-risk and harsh environments, such as those found in the chemical, oil and gas, and emergency fire-response sectors.

Supports APP control, real-time preview, and output of results.

Flexible deployment, reliable data.



Scanning Distance **120 m**

Scanning Speed **320,000 PTS/Sec**

Scanning Range **360°x270°**

Scanning Accuracy **5mm(highest)**



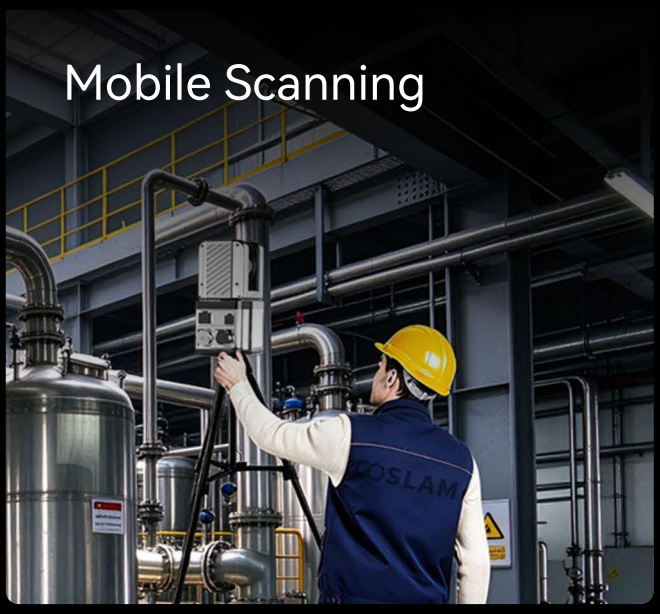
Communication Interface

Ethernet Port

Tripod-based Scanning



Mobile Scanning



Dust-proof and Waterproof



Smart App Control



Explosion-proof Certification For The Chemical Industry

The JY-C01 has obtained national explosion-proof certification for the chemical industry and complies with the Ex ib ⅡC T4 Gb standard.

Dual Scanning Modes, Catering To Diverse On-site Operational Requirements

Mobile tripod-based scanning offers stability and precision comparable to traditional stationary laser scanners. It is well-suited for data acquisition in applications such as **digital factory mapping**, **pipeline and utility network surveying**, and **BIM modeling**. Supporting **real-time processing**, this **mobile scanning** solution enables **rapid output generation**—making it ideal for the quick creation of 3D data in **emergency response scenarios**. Furthermore, it can be integrated with various explosion-proof robots to operate within hazardous environments, ensuring personnel safety while effectively capturing critical data.



Tripod-based Scanning

Tripod-based scanning enables the acquisition of high-precision laser point cloud data of a site through post-processing.

Mobile Scanning

Purely mobile scanning enables real-time processing, allowing for the fastest possible acquisition of 3D point cloud data from a site.

Explosion-proof Certification, Safe Operations

The **JY-C01 has obtained explosion-proof certification** for the chemical industry, allowing it to legally enter high-risk, **flammable and explosive environments**. By eliminating the risk of combustion or explosion, it ensures the safety of both personnel and equipment, and can be deployed ahead of human responders during fire or emergency situations to collect critical data from hazardous zones.



Dust-proof and Waterproof—un-fazed by Harsh Conditions

High-level protection, including dust and water resistance, ensures the equipment remains operational under harsh working conditions.



Waterproof | Dust-proof

Multiple Control Methods, Flexible Configuration

The device **supports both app-based** and **physical button controls**. It is **ready to scan immediately upon startup**—no complex setup required—allowing users to get up to speed quickly and respond easily to unexpected situations. Through the companion app (compatible with Android), **users can view point cloud data in real time**. Additionally, **a web-based console is available**, ensuring compatibility with other explosion-proof mobile terminals and **enabling wireless control of the scanner**.

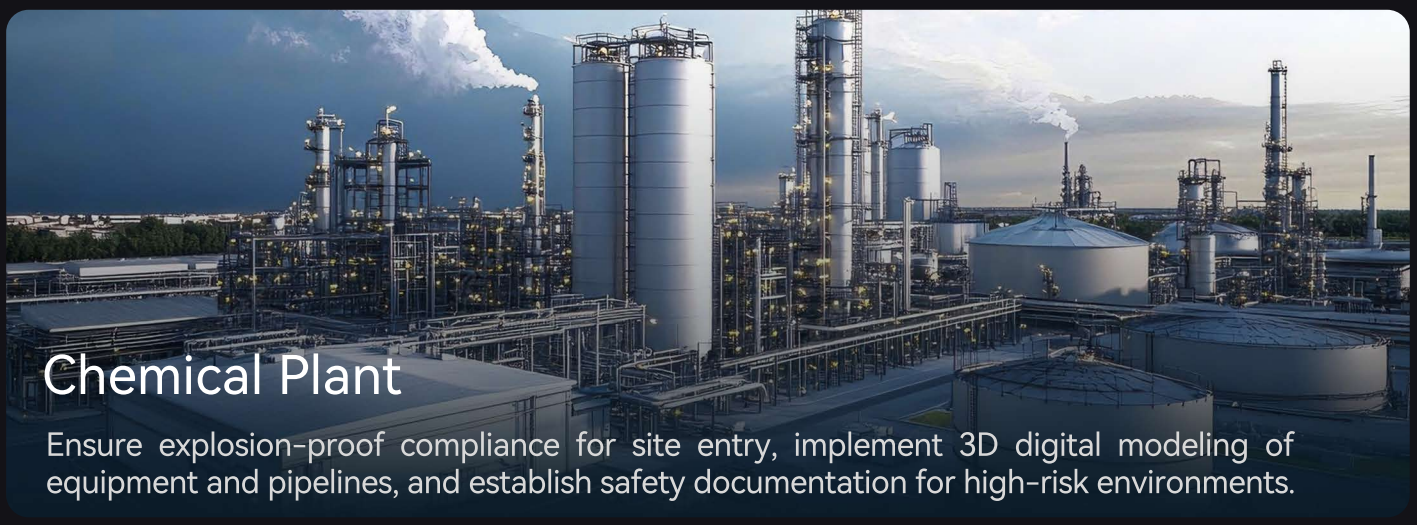


Real-time Processing, Rapid Response

In pure mobile mode, the built-in SLAM algorithm performs simultaneous scanning and processing, **generating 3D point clouds and final models in real time on-site**. With the companion app, users can preview the scan as it progresses, ensuring full coverage and eliminating the need for rework due to missed areas. In time-critical scenarios—such as fire emergency response or accident investigation—this allows for the immediate acquisition of data, securing vital time for command and decision-making.



Industry Scenarios



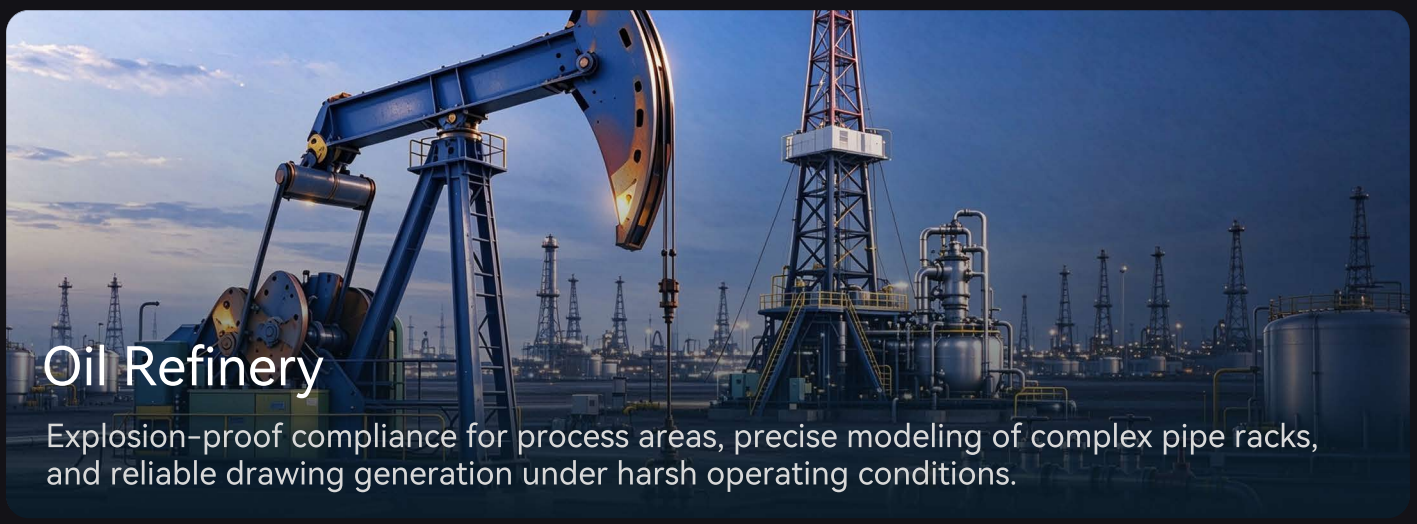
Chemical Plant

Ensure explosion-proof compliance for site entry, implement 3D digital modeling of equipment and pipelines, and establish safety documentation for high-risk environments.



Natural Gas

Explosion-proof scanning of facility and station pipelines, safety mapping of areas at risk of leaks, and acquisition of 3D site conditions within minutes.



Oil Refinery

Explosion-proof compliance for process areas, precise modeling of complex pipe racks, and reliable drawing generation under harsh operating conditions.

Supporting Software

GoSLAM Manager APP



Monitor device status in real time via mobile, control data acquisition wirelessly, preview and process point clouds on the fly, and configure RTK with a single tap.

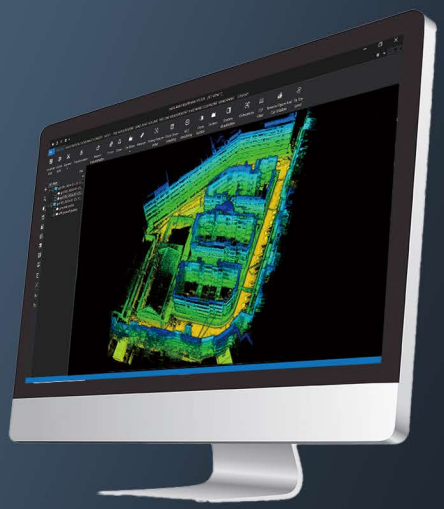
Real-time Data Display

View point clouds in real time to intuitively gauge data acquisition progress and quality.

Multiple Interaction Methods

The APP supports a variety of browsing interactions and human-machine interface features, making operation more convenient and intelligent.

GoSLAM LidarWorks



Professional point cloud editing software featuring visualization, model optimization and panoramic integration. It supports industry-specific modules as well as point cloud classification and recognition, ensuring highly efficient workflows.

Point Cloud Processing

GoSLAM LidarWorks features a range of basic functions, including one-click point cloud denoising, point cloud stitching, global registration, shadow rendering, coordinate transformation, ground classification, data cropping, orthographic projection, and point cloud packaging.

Functional Module

The software comes with nine built-in industry modules (forestry / sand vessels / pipelines / stockpiles / mining / digital assets / mapping / terrain / registration), covering the entire process from data collection to results, reducing learning costs and comprehensively improving operational efficiency.

GoSLAM Mapping Master



Desktop point cloud post-processing software, offering a standalone post-processing solution with simple operation, flexible application, and rich parameters for superior data results.

Multiple Scene Processing Modes

Supports switching between different precision levels and scene modes for data processing, based on the specific scanning scenario and requirements.

Batch Data Processing

Supports data queuing and batch processing of multiple datasets, requiring no manual oversight.

Anchor Point Processing

By incorporating known point coordinates into the calculation process, the system achieves high-precision data correction; it enables the acquisition of high-accuracy results even during handheld data collection, making it suitable for operations in any environment.

Product Specifications

Laser Class	Level I
Number of Laser Lines	16 lines
Scanning Distance	120m
Scanning Speed	320,000 PTS/Sec
Scanning Range	360°x270°
Solution Method	Real-time Processing, Desktop-end Processing
Point Accuracy	5mm(Highest)
Rotational Angle Accuracy	0.005°
IP Rating	66
Operating Temperature	-20°C~65°C
Operating Mode	APP,IP Access
Explosion-Proof Sign	Ex ib IIC T4 Gb
Scan Time	2.5h
Built-in Solid-state Drive	500GB
Product Housing	Anti-static ABS
Weight (Without Battery)	3.5KG

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