XGRIDS

3D Intelligent Technology & Service Provider

3D Reconstruction | **Reality Capture Hardware** | **Spatial Computing** | **Photorealistic Metaverse**

Company Introduction

XGRIDS is committed to building more comprehensive 3D spatio-temporal intelligence technology and bridging the physical and digital worlds for a shared future.

With micrometer to kilometer level high-precision 3D reconstruction and intelligent spatial computing capabilities, we provide integrated software and hardware solutions for fast 3D content generation and applications.

X G R I D S

Top-tier Team

The team has in-depth industry and academic background in 3D field. Members are from leading global technology companies, with rich product experience and forward-looking market insights.

Core Technologies

World-leading R&D capabilities: AI spatial intelligence, high-precision multi-scale 3D reconstruction, proprietary Multi-SLAM algorithms, distributed high-performance computing, edge computing and so on.
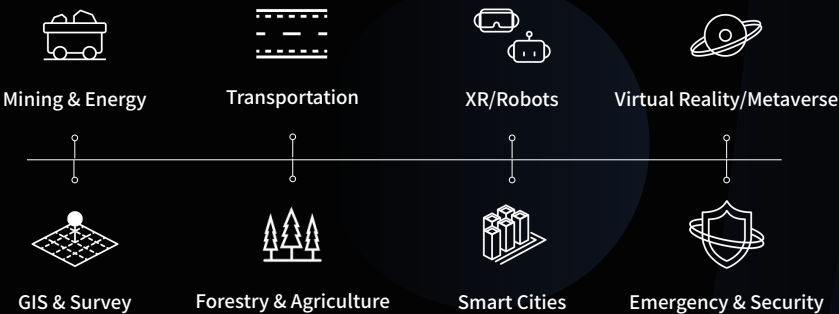
Product Capabilities

End-to-end software and hardware integrated product solutions, covering the entire value chain from 3D capture, reconstruction, processing to applications.

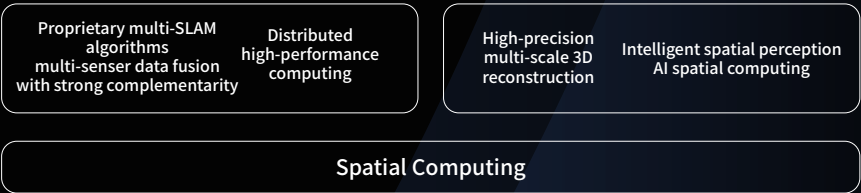500+ Customers   30+ Invention Patents   75% R&D Team Members

Application Layer

Mining & Energy	Transportation	XR/Robots	Virtual Reality/Metaverse
GIS & Survey	Forestry & Agriculture	Smart Cities	Emergency & Security

Product Layer

Lixel L Series
Flagship real-time 3D scanner

Lixel K1
Compact 3D Scanner

Lixel R1
Multi-Sensor Emergency Mapping Solution

LixelStudio
3D Intelligent Processing Software

Real-time 3D Reconstruction

3D Intelligent Processing

Technology Layer

Proprietary multi-SLAM algorithms
multi-senser data fusion with strong complementarity

Distributed high-performance computing

High-precision multi-scale 3D reconstruction

Intelligent spatial perception
AI spatial computing

Spatial Computing

Lixel L Series

Flagship real-time 3D scanner

Lixel L Series integrates LiDAR, visual, and IMU modules with AI technology, it achieves breakthroughs in real-time data quality and usability. With improved real-time point cloud data matching the post-processed quality, Lixel leads the way into the new "zero post-processing era" for SLAM devices.

Relative Accuracy
±1cm[1]

Real-Time Absolute Accuracy
3cm[2]

Real-time color point clouds

Ready to use real-time data

Reliable and Robust

All in one

Previous product / L2 Pro

Post-processing / Real-time
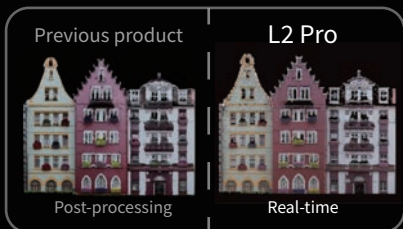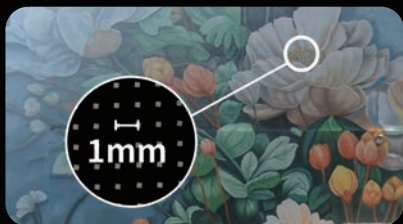
Real-time data comparable to post-processing quality direct output for immediate mapping and modeling.

DATA
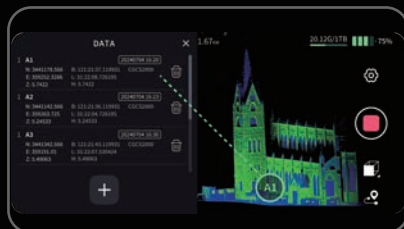
Real-time absolute accuracy of 3cm.

1mm

Exclusive LixelUpSample™ point cloud algorithm denser point clouds, sharper detail.

5mm

5mm point cloud thickness enhanced precision for mapping and drawing.

[1] The distance between two points is less than 100 meters
[2] The disconnection distance of the control point/RTK is less than 100 meters.

Lixel K1

Compact 3D Scanner

Lixel K1 is XGRIDS' compact handheld scanner. Integrating 48MP x 2 panorama cameras and 360° LiDARs within its body, it generates cm-level colored models for professionals and 3d hobbyists, offering convenient scanning and reconstruction experience.
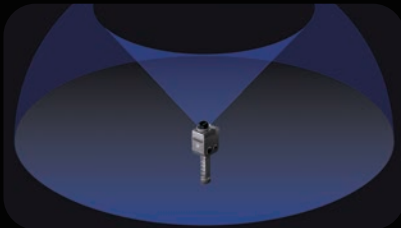
1KG

1kg

Color point cloud in real-time

360° scanning

Convenient operation

With a 1kg body, K1 highly Integrated panoramic vision and LiDAR.

48 MP x 2 imaging provides exquisite real-time true-color point clouds.

360°*360° true panoramic vision, 360° laser horizontal scanning field.

Its low learning cost makes 3D scanning and modeling extremely simple.

Lixel R1

Multi-Sensor Mapping Module

Designed for real-time localization and mapping (SLAM) for robots, Lixel R1 excels in multi-sensor data fusion, real-time mapping, and remote data transmission, providing an unparalleled solution for robots and their operators to quickly grasp environmental conditions. This module empowers robot swarms with enhanced coordination and operational efficiency.
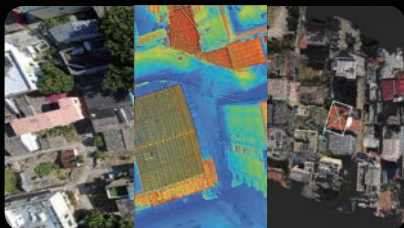

LiDAR/Camera/Infared

Real-time modeling

Multi-devices collaboration

Remote transmission

R1 performs real-time calculation on board, getting 3D data from laser, infrared, visual sensor and RTK in one operation and merging data seamlessly.

Overlay of online/offline/custom maps displays abundant information, allowing cm-level real-time 3D measurements.

Real-time mapping, data transmission, and environmental awareness ensure coordination and operation of robots fleets in complex scenes.


Large data transmitted to ground station in real-time, up to 10km network communication.

LixelStudio

3D Intelligent Processing Software

LixelStudio is XGRIDS' independently developed 3D processing software, providing viewing, editing, and processing services for laser point clouds and other data, along with industry plugins. It covers the entire workflow of data-model-application, bringing breakthrough productivity in 3D data.
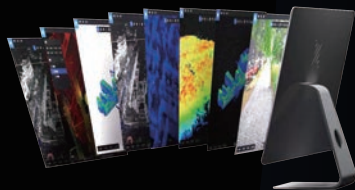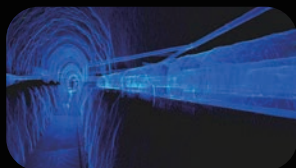
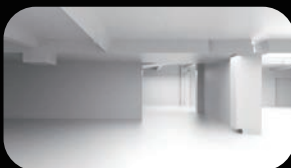**One-stop processing**   **AI empowerment**   **Remote collaboration**   **Abundant plugins**

Massive Data Loading

It can load massive point clouds on the screen simultaneously, with no pressure on clipping, measuring, and rendering.
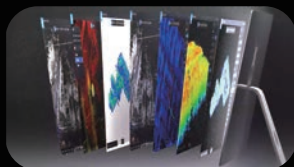
Data Vectorization

CAD, BIM, 3D white model, and other data can be more compact and user-friendly.

AI Spatial Understanding

Monolithic and semantic segmentation, and dynamic object removal truly help to understand the space information.

Industry Plugins

Abundant and expandable plugins meet the data needs of various industries.

Remote Sync

5G network for real-time viewing and downloading make remotely command job dynamics in real-time possible.

Lixel CyberColor

Next-Gen 3D Content Technology Based on Multi-SLAM & 3DGS

Lixel CyberColor (LCC) represents a groundbreaking advancement in 3D content generation. It utilizes a combination of a self-developed Multi-SLAM algorithm and optimized 3DGS technology, allowing users to automatically create ultra-realistic large-scale 3D models.

Large-scale modeling	Automated generation	Centimeter-level accuracy	Multi-platform compatibility	Advanced development

*Compared with the open-source 3DGS algorithm.

Revolutionizing 3D content production, LCC creates vast, lifelike models, overcoming modeling challenges in large spaces and complex environments.

Our local rendering algorithm ensures smooth operation for various platforms, reducing model size by 90%* through proprietary data compression technology.

Lixel spacial camera improves scanning success rates while achieving cm-level precision, enabling on-site measurement and annotation within model scenes.

LCC plugins and SDKs will be available for Unity, UE, Web and Mobile, Empowering unprecedented boundless reproduction of 3D content.

Applications in Industries

Mapping and Surveying

Real-time scanning and modeling hardware and software products reshape the entire surveying and mapping process, 5-10 times improving efficiency in and out of the field.

Real-world 3D · Land-Air Fusion · DEM/DSM

Smart City

Building City BIM/CIM models, integrating above and below-ground spaces data, realize digital management in city lifecycle.

Grid Management · Urban Renewal · CIM/BIM

Emergency Security

Quickly generated on-site 3D models gets real-time feedback of on-site situation, providing data support for emergency command.

Digital Mine · Pile Measurement · Power Inspection

Energy and Mining

Addressing the rapidly changing needs of mornitoring in the energy field, our solutions assist in the digitalization and intelligent upgrade of the energy and minning industry.

Digital Mine · Pile Measurement · Power Inspection

XR/Robotics

Integrated perception and algorithm generate real-time spatial maps, providing overall spatial perception and intelligent decision

Spatial Maps · Spatial Intelligence · Instant Localization

Metaverse

Realistic Metaverse space interaction/management solutions make 1:1 reproduction of real space, creating a personalized Metaverse experience.

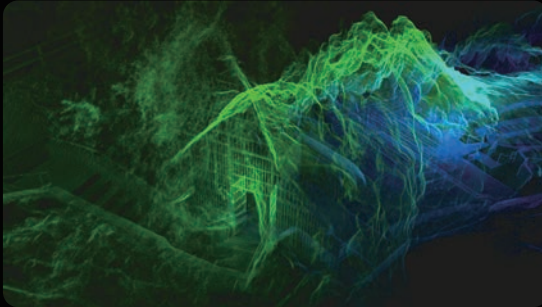Realistic Space · Multimedia Presentation · Virtual and Real Combination

Customer Cases

China Cultural Media Group Cultural Tourism Metaverse Platform
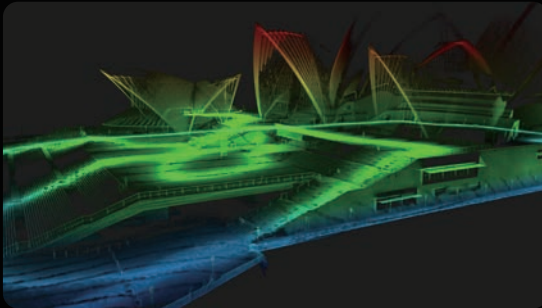
Metaverse

Underground River Digital Art Image Project and CaveEntrance 3D Theater Engineering
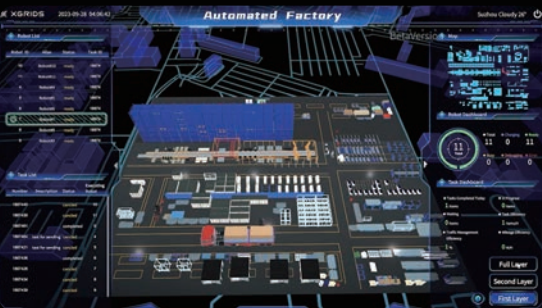
Digital Twins of Caves

Learn more

Sydney Opera House

Scan to BIM

Unmanned Factory Management System

Digital Twins of Factory

Learn more

Customer Cases

Mount Eden, Auckland's iconic landmarks

Land Survey

Hong Kong Ancient Tree Scanning and Modeling

Scan to 3D Model

Learn more

Historic Building

LCC Model

Learn more

Lake Scene Lobby

LCC Model

Learn more

Contact Us

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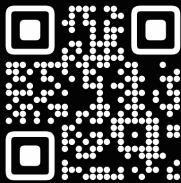
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Sales and Partners: sales@xgrids.com
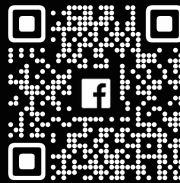Brand and Business Consulting: enterprise@xgrids.com

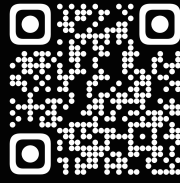For technical, product, or recruitment information, please follow our social media accounts:

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