The 4DKanKan **META**, a self-developed 3D laser scanner by the 4DAGE, relies on artificial intelligence algorithms to achieve high-precision 3D reconstruction of space. With the advantages of high efficiency, high precision and low cost, the META has become a cost-effective 3D laser scanner in the industry, widely used in public safety, foren-sic engineering, asset management, architecture, engineering and construction, residential real estate, culture digitization and etc.

4DAGE, established in October 2014, is dedicated to artificial intelligence 3D digitalization, digital twins, and the research and application of new technologies in the surveying and mapping industry. With years of prac-tical experience in 3D digital reconstruction, 4DAGE has released a variety of reality 3D acquisition devices. 4DAGE has obtained 99 authorized patents and 208 software copyrights as of June 2023.

4DKanKan Series Products

4DKanKan Alibaba Youtube

4DAGE — DIGITAL EVERYTHING

4DKanKan — Let space tell the story

4DMeta

Terrestrial Laser + Wearable SLAM Scanner

The 4DKanKan **META** is a brand new 3D laser scanner with dual acquisition modes of terrestrial laser scanning and weara ble SLAM . Equipped with 905nm ultra-wide-angle LiDAR and combined with the industry's leading point cloud fusion algorithms, the 4DKanKan **META** can produce 16K high-definition panoramas and high-precision point cloud data, with a point cloud accuracy of 1cm. Equipped with multi-functional modules such as RTK module, thermal module and multi-spectral module, it provides in-depth solutions for the industries.

Multi-functional Modules

Through the external and independent function modules, the **META** is able to display data from multiple dimens ions based on 3D data.

RTK

Supports **GPS** and **BDS** signal reception, solution and positioning, quickly providing accurate locati-on information.

Thermal

With high sensitivity tempera-ture detector, the thermal module of 4DMeta can quickly read the information of ambi-ent temperature, measurement precision at ±2°C.

Multi-spectral

The multi-spectral module sup-ports snapshot acquisition to capture multiple spectral bands and acquire multi-spectral im-ages simultaneously.

Fill Light

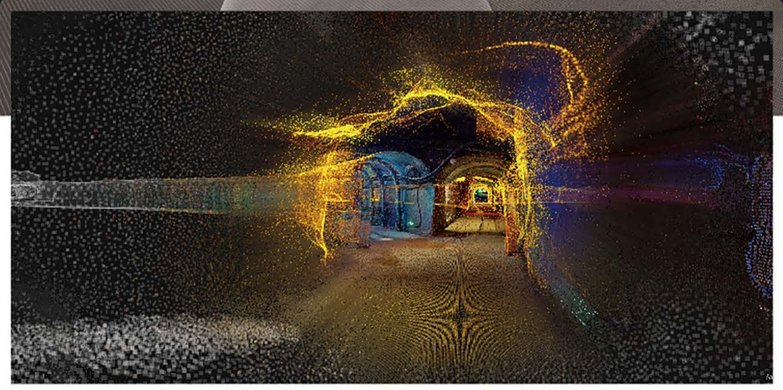
When working in a dark en-vironment, you can use the fill light to complement the acquisition, high brightness, low power consumption, improve the work efficiency.

4DMeta

In-depth customization for industry characteristics.

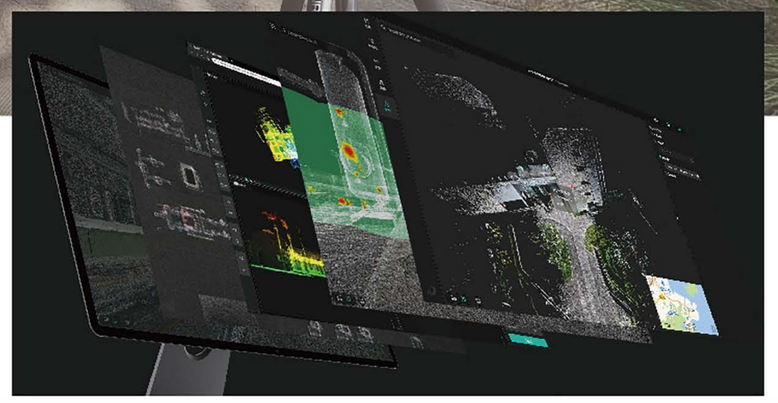
Terrestrial Laser + Wearable SLAM Scanner

Innovative acquisition method of terrestrial laser scanning and wearable SLAM , meets the needs of data acquisition in complex spaces. Automatic accuracy calibration by proprietary algorithm, fills the gap of traditional operation modes. Segmented SLAM acquisition, not subject to external environmental constraints, more reasonable arrangement of operation time. Terrestrial scanning as an aid to acquisition, improves the accuracy of SLAM point cloud data, and capture high-definitionlaser panoramas at the same time.



Dynamic Coloring

Using two wide-angle cameras and multi-sensor clock synchronization algorithms, the point clouds are dynamically and accurately colored during SLAM operations and rendered in real time to replicate the real world.

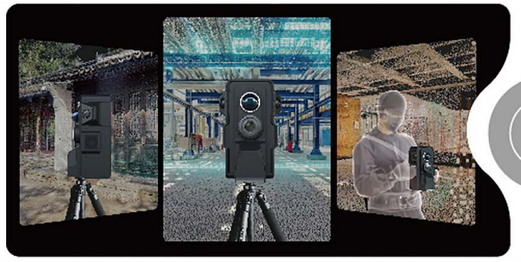


Multi-functional Accessories

Innovative idea of modularization, brings extraordinary experience. Through the external and independent function modules, such as RTK module, thermal module, multi-spectral module and fill light module, the multiple modules of 4DMeta are able to display data from multiple dimensions based on 3D data.

Product Features

New experience for 3D digitalization



Terrestrial Laser + Wearable SLAM

Innovative acquisition method of Terrestrial Laser Scanning + wearable SLAM, self-developed algorithms automatically calibrate the accuracy.

Multi-functional Modules

Abundant external and independent function accessories. 4DKanKan Meta can connect to thermal module, multi-spectral module, high-precision RTK module,and fill light module.

16K Ultra-HD Panorama

Ultra-HD vision lens, collects point clouds and captures 16K Ultra-HD panoramas at the same time, with true-color point cloud coloring at the pixel level.

Point Cloud Accuracy at ±1cm

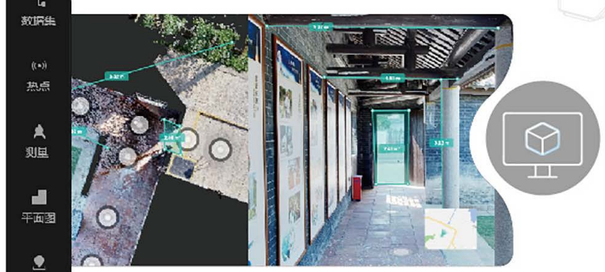
905nm ultra-wide-angle LiDAR, fully automated point cloud generation with centimeter-level accuracy to capture more 3D spatial data.

Dynamic Coloring of Point Cloud

Using two wide-angle cameras and multi-sensor synchronization algorithms, the point clouds are dynamically and accurately colored and rendered in real time to replicate the real world.

AI Algorithm Processing

Fully automated AI post-processing, produces point cloud, panoramas and Mesh model with one touch once the data is captured and uploaded.



Supporting Software

Powerful editing platform that allows you to view, measure, edit and export point clouds and panoramas, and supports professional software.

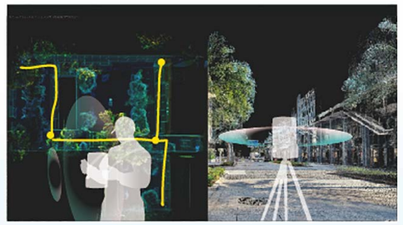
Information Privatization

Supporting the privatization of IT information, we are building a digital twin center for industrial users to keep data safe and secure.

Instructions

Easy to use, fully automated processing with one-click upload

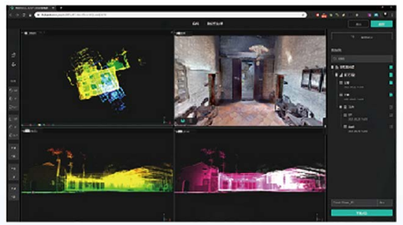
1 Space Acquisition



Extremely fast field acquisition, self-developed algorithms for automatic accuracy calibration; Segmented SLAM acquisition combined with terrestrial laser scanning, improves the accuracy of SLAM cloud data, and captures high-definition panoramas at the same time.

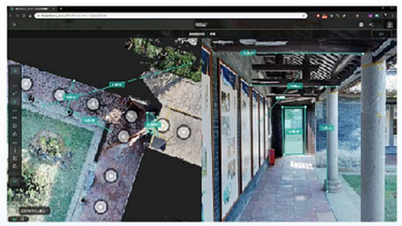
2 Data Processing

Once the data is uploaded to the server, the point cloud data and images will be automatically processed to quickly generate mesh models and roaming scenes.

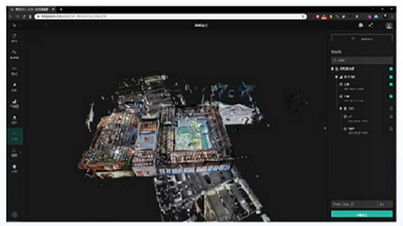


The editing platform provides functions such as calibrating datasets, merging multiple datasets, adding labels, editing point clouds, registering geographic information, and drawing floor plans.

3 Data Publishing

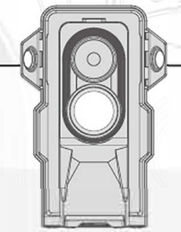


Data is published in the form of scene roaming, supporting panoramas and point clouds in multiple modes of immersive roaming, and supporting accurate measurements within the scene.



Supports point clouds downloaded in .las, .xyz and .ply format, model data in obj format, and panoramas download. Supports scene offline package download for private deployment.

Technical Specifications



Device Type	3D Laser Scanner
Capturing Mode	Terrestrial Laser Scanning, SLAM
Laser Safety Class	Class 1(IEC60825-1:2014) Eye-Safe
Scanning Range	0.2m~70m
Field of View	Horizontal 360°, Vertical 320°
Laser Wavelength	905nm
Accuracy	±1cm
Image Resolution	16384×8192px
Output Format	Point Cloud (.las .ply .xyz), Model (obj), Panorama (jpg)
Storage Device	16GB LPDDR4 Memory 128GB eMMC Storage
Wifi	Wi-Fi 802.11a/b/g/n、2.4/5GHz
Bluetooth	16k 16bit AAC
Battery	Lithium Polymer Battery, with Battery Life up to 4 Hours.
Positioning System	GPS/ BDS
Product Dimensions	258mmX169mmX141.5mm
Weight	≈2.9kg(Battery Included)
Working Temperature	-5°C to 45°C

Application Scenario

In-depth customized solutions for industry characteristics.

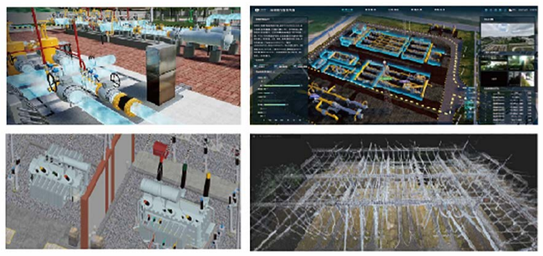
4DKanKan **META for Public Safety**

Enhance emergency response and seamless facility management in the public safety industry.

The META Advantage

With 4DMeta, law enforcement officers can capture scene data and obtain rapid results, enhancing on-site investigation and evidence collection in criminal, traffic, and fire scenes. The scanner, equipped with thermal, multi-spectral, and RTK modules, provides comprehensive data to support public safety management, enabling efficient scene preservation.

Leveraging our 4DMeta digital twin technology, public safety agencies can simulate emergencies, develop plans, and conduct training for improved preparedness. With spatial simulation and planning, agencies can allocate resources effectively during emergencies. Virtual training enhances personnel capabilities, reducing risks, while automated inventory management streamlines operations and ensures accurate tracking.

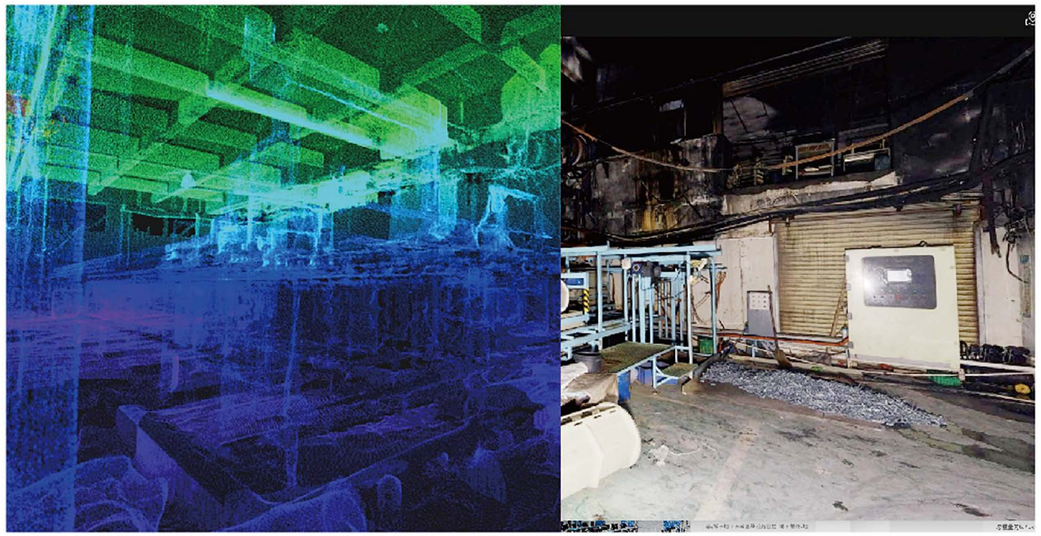


4DKanKan **META for Forensic Engineering**

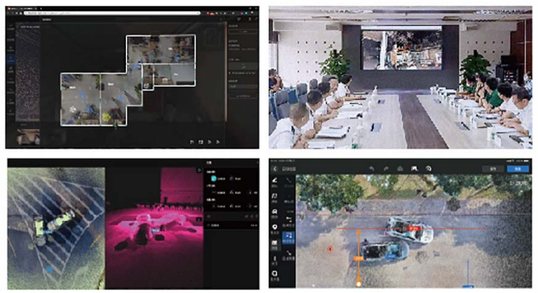
Streamline forensic engineering investigations with our powerful 4DMeta digital twin technology for precise documentation, virtual reconstruction, and data-driven analysis.

The META Advantage

With 4DMeta, law enforcement officers can capture scene data and obtain rapid results, enhancing on-site investigation and evidence collection in criminal, traffic, and fire scenes. The scanner, equipped with thermal, multi-spectral, and RTK modules, provides comprehensive data to support public safety management, enabling efficient scene preservation.



Our cutting-edge 4DMeta scanner provides immense value to our clients by capturing comprehensive data. This data plays a vital role in preserving the scene and collecting evidence, empowering investigators to uncover essential details, identify patterns, and extract valuable insights. By utilizing this advanced technology, our clients can conduct thorough and effective investigations, ensuring justice is served.



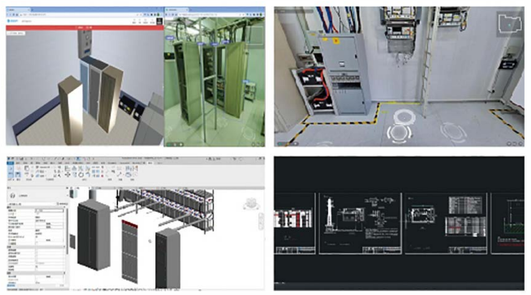
4DKanKan **META for Asset Management**

4DMeta digital twin technology offers innovative solutions for asset management, revolutionizing the way organizations track, monitor, and optimize their assets.

The META Advantage

Revolutionize your asset management strategy with 4DMeta's game-changing digital twin technology. Say goodbye to inefficiencies and hello to enhanced visibility, optimized operations, and unparalleled ROI.

From real-time tracking to predictive maintenance and data-driven insights, our solution empowers you to extract maximum value from your assets.With 4DMeta, unlock the true potential of your assets, make informed decisions, and propel your business towards success. Don't settle for mediocre asset management—embrace the future with 4DMeta's advanced digital twin technology and experience a new era of efficiency and profitability.

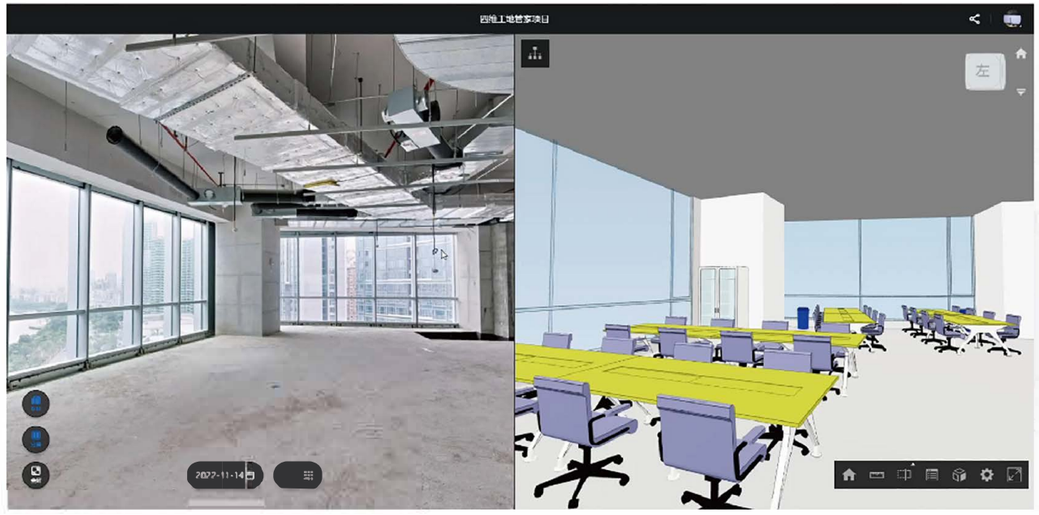


4DKanKan **META for Architecture & Construction**

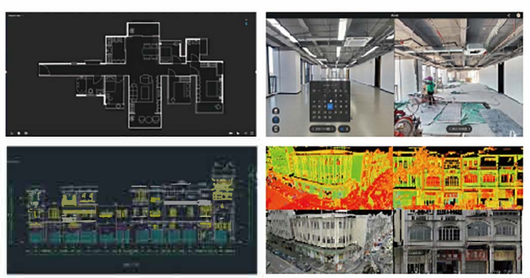
Digital management from BIM to real construction, document the key milestones accurately and objectively.

The META Advantage

4DMeta's digital twin technology provides a robust, accurate, and efficient solution for documenting buildings and properties. It offers a comprehensive approach to streamline your construction project workflow, enabling seamless as-built creation and fostering stakeholder collaboration anytime, anywhere.



With our wearable SLAM model scanning, you can obtain a 3D point cloud and model with exceptional detail for an area of 1000 square meters in less than 30 minutes. In particular, it provides a powerful tool for construction supervision, from BIM to the construction process, especially for foundation and concealed works. You can achieve significant cost reductions in BIM modeling. Additionally, you can engage in online discussions with your partners, eliminating the need for travel and site visits.

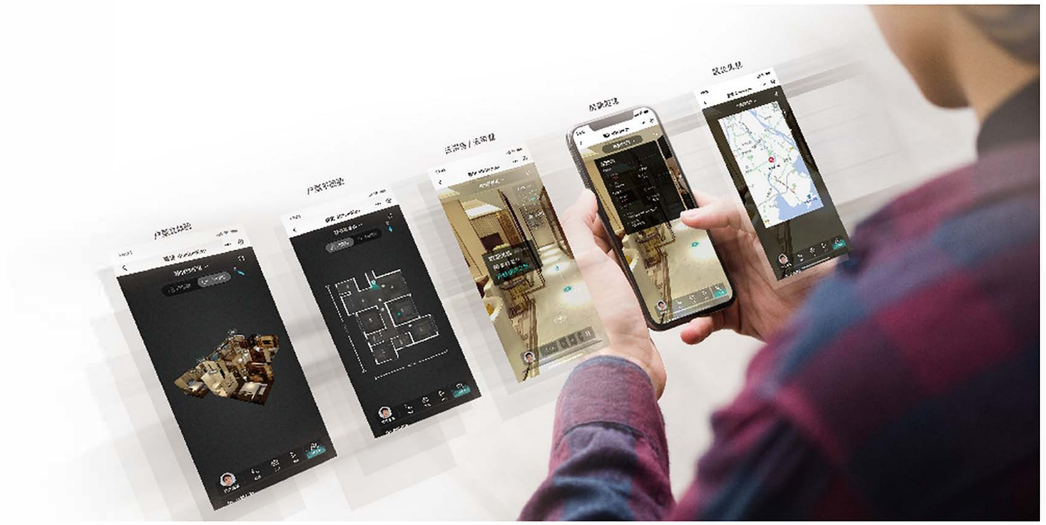


4DKanKan **META for Real Estate**

Elevates the real estate marketing with an of immersive all-in-one digital twin

Business Pain Points

Traditional real estate marketing faces the problems of lack of exposure, loss of property details and great needs of on-site visits.



Reach more audience and elevate your listings with 4DMeta.

- High efficiency, space modeling of a 100㎡ property in 10 minutes.
- High resolution, detail-rich, vibrant 3D virtual tours.
- Accurate floor plans depicting layout and room dimensions.
- Rich point cloud data, precise measurement for everything.




4DKanKan **META for Culture Digitization**

Preserves and recreates historical heritage with digital tools

Business Pain Points

Traditional digital archive with oblique photography and other modeling methods are costly, lack of detail, and are not as accurate as needed.

Immersive 3D virtual tours to walk through

- HDR photography, stunningly accurate reproductions of the eyes can see
- Point cloud accuracy at±1cm, meeting the needs of digital preservation and restoration.
- In-depth developments, bringing integrated applications of meta-universe, AR and MR technology.
- Cost-effective, an all-in-one digital twin embedded in your website without a plug-in.