DEEP IN SIGHT

Portable 3D spatial scanner

DIMENVUE

Real-Time 3D Scanning, Anywhere

DIMENVUE Introduction 2025

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Company

Company Overview

A company that creates the eyes of future industries

DEEP IN SIGHT is a leading company specializing in AI-based 3D sensing camera solutions,
embedding intelligence into cameras to solve cross-industry challenges and set a new standard in 3D sensing.

Cumulative Funding Raised — **18.1B KRW**

Employees — **44 employees**

MOUs / NDAs — **60+ cases**

CEO	Lucas Oh
Date of Establishment	June 25, 2020
Core Business	Development of vision-AI solutions and camera systems
Key Products	Portable 3D Spatial Scanner · In-Cabin Monitoring System · Advanced Medical AI Camera
Website	www.dinsight.ai
Address	A-404, U Space 2, Daewangpangyo-ro 670, Bundang-gu, Seongnam-si, Gyeonggi-do

History

Relentless challenges and achievements

Based on the achievements accumulated through technology development and market expansion, we are leading change across industries on the global stage, creating greater future value.

2020

- JUN Established DEEP IN SIGHT
- JUL Established DEEP IN SIGHT Corporate Research Institute
- DEC Selected as a TOP 10 Startup in the K-Global Startup Contest

2021

- JAN Selected for the TIPS program
- JAN Selected by NIPA as a demonstration AI company (Driver State Recognition Solution)
- APR Attracted SEED investment (KRW 0.8B)
- JUN Selected for Future Play-Mando TechUp+ 3rd term
- DEC Received the Minister of SMEs and Startups Award

2022

- FEB Selected for the 2022 Dream Play with GCCEI
- APR Selected as a First Penguin by the Korea Credit Guarantee Fund
- APR Selected for the 2022 ZER01NE
- MAY Selected as one of the Top 100 Materials–Parts–Equipment Startups
- AUG Attracted Series A investment (KRW 4.3B)

2023

- APR Signing MOU with Mobase Electronics for co-developing ICMS
- MAY Selected for DIPS 1000+ Project
- AUG Selected as the official Korean partner for Infineon Technologies COINS

2024

- JAN Signed an MOU with thermal imaging camera company EOC and LiDAR company OUSTER
- JAN Selected as one of the Emerging AI+X TOP 100
- OCT Portable 3D spatial scanner 'DIMENVUE Pro' won CES 2025 Innovation Awards
- DEC Attracted Series B funding (KRW 11B)

2025

- MAY Selected for the Innovation Premier 1000 program
- JUN Selected for the K-Startup Center (KSC) program
- JUL Signed the NDA with Continental
- JUL Selected for the SCALE-UP TIPS Program
- JUL Signed an MOU with quantum software company ORIENTOM

Our Clients

Partnership for mutual growth

Customers from various industries, including global OEMs, construction companies, logistics firms, and research institutions,
are implementing DEEP IN SIGHT's technology on-site to solve the challenges faced by each industry and continue sustainable innovation.

HYUNDAI

KIA
Movement that inspires

CJ LOGISTICS

CMES
AI ROBOTICS

OUSTER

hp

GS 건설

HOBAN

LH 한국토지주택공사

KIER 한국에너지기술연구원
KOREA INSTITUTE OF ENERGY RESEARCH

NOVA APERIO 1951 충북대학교
CHUNGBUK NATIONAL UNIVERSITY

1398 성균관대학교
SUNGKYUNKWAN UNIVERSITY(SKKU)

02

Products

Key Features

The Integrated Solution for 3D spatial information scanning

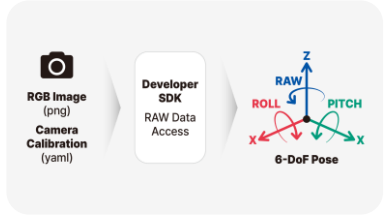
To meet demand for precision spatial data, DEEP IN SIGHT developed the portable 3D spatial scanner "DIMENVUE".
It supports anyone, from field operators to experts, in capturing data efficiently and building accurate, efficient digital twin environments.

Real-Time Results Verification

Immediately compensates for missing areas during scanning with high data quality that can be verified on-site

Point Cloud Processing at 1–5 mm Precision

Reproduces fine structures in detail by precise post-processing



RAW Data Provision

Provides unprocessed source data via a developer SDK

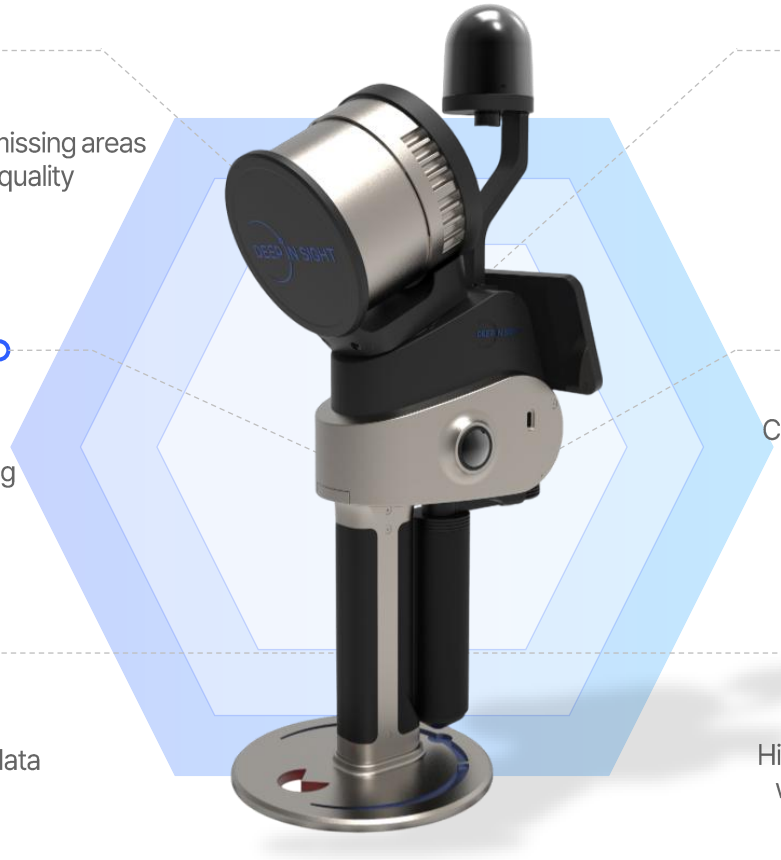


Photo-Level Point Cloud Generation

Implements visually intuitive and realistic Point Cloud through RGB correction

High-Resolution 3D Modeling

Creates highly usable 3D outputs via PCD-based meshing and textured modeling

Multi-Format File Support

Highly scalable via interoperability with Autodesk, Unity, and others

AUTODESK.
UNREAL ENGINE
Unity

3D Data Generation Process

A 3D data workflow completed on site

DEEP IN SIGHT's 3D spatial information technology automatically corrects, refines, and visualizes on-site scans into high-quality 3D data that can be used immediately. It allows for the acquisition of precise spatial information without separate equipment or complex processes, accelerating efficiency and innovation in various industries, such as construction, infrastructure, and digital twins.

DIMENVUE

Scan data collection

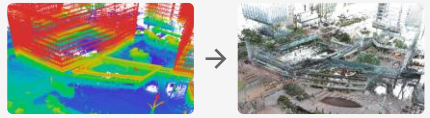
SLAM-based PCD and RGB correction

Capture precise source data on site in real time

DMV Edit

Scan data editing

PCD Visualization & Mesh Generation



PCD Outlier Detection & Post-processing

Minimize clutter and noise to secure intuitive data visibility

DMV Render

Visualization implementation

Rendering Support Based on Latest 3DGS Technology

- 3DGS Training & Generation
- 3DGS Visualization
- 3D Engine Integration

High-resolution visualization enables lifelike and immersive output

DMV Viewer

Visualization utilization

SaaS-based large-scale storage management

Provides web-based high-definition virtual tour services

Support sharing and collaboration to maximize deliverable utilization

Hardware

DIMENVUE, The Portable 3D spatial scanner

DIMENVUE is a next-generation solution that overcomes the limitations of traditional 3D scanning, which relied on complex post-processing and heavy equipment, allowing for immediate acquisition of precise spatial data on-site. Its lightweight, rugged, and ergonomic design enables more efficient project operations than other products with complex settings.

Lightweight Design

Optimized for long-term operation and field mobility with a weight of 2.7kg

Smartphone-based UI

Minimizes the user's learning curve with a familiar operating environment

Rugged Durability

Stable use in outdoor environments

Ergonomic Structure

Two-hand operation supports portability and ease of use

Stand-mounted operation

Optimized for various work environments through a fixed support method

> DIMENVUE Specs

Weight	2.7 kg	Capture Speed	20 Scan/s
Dimensions	192 x 148 x 433 mm	FOV	190° H / 190° V
External Finish	AL	Battery Voltage	14.4 V
Interface	USB 3.1 Gen 2	Battery Capacity	46.8 Wh
Power Consumption	< 30 W	Display	Smartphone
Storage	512 GB SSD	Communication	Wi-Fi connection
Operating Time	1.5 hours	Accuracy (RMSE)	± 1cm (under 100m)
Operating Temperature	-20°C ~ +50°C	Point Cloud Format	.LAS .PLY
Mesh Generation	Supported	Photo Format	.JPG
Multi SLAM	Supported	LiDAR Class	Class 1 / 905 nm
Real-time RGB	Supported	LiDAR Channel	16
Real-time RTK	Supported	LiDAR Range	120 m
Camera resolution	48 MP * 2	LiDAR FOV	360° x 270°
Boot Time	< 30 s	PCD Collection Speed	~320,720 points/s

Software

DIMENVUE App

A dedicated mobile app integrated with DIMENVUE, providing live scan control, point-cloud preview, and device status monitoring for fast, efficient on-site 3D scanning.

▶ App Download (In Progress)

Android

Real-time point cloud preview

- Preview point clouds while scanning in sync with DIMENVUE
- Immediate identification of missing areas on-site with photo-quality data for immediate re-scanning

Intuitive measurement tools

- Various measurement functions, including points, distances, areas, and angles
- Supports both metric and imperial units, making it usable in global project environments

Quality verification automation

- Ensures reliability of scan results through checkpoint-based quality verification
- Improves decision-making process through simple report generation and sharing on-site

Stability based on on-device processing

- Real-time on-device processing without cloud connection
- Reliable acquisition of on-site data regardless of network environment

Integration scalability

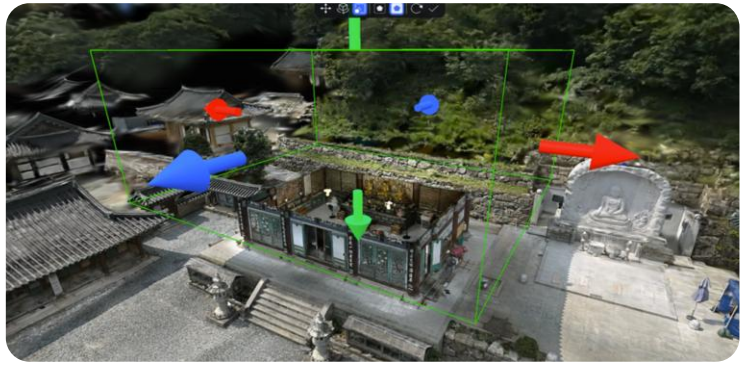
- Seamlessly connects with DIMENVUE Edit, Render, and Viewer
- Easily expandable to industry-standard workflows, such as BIM, CAD and GIS

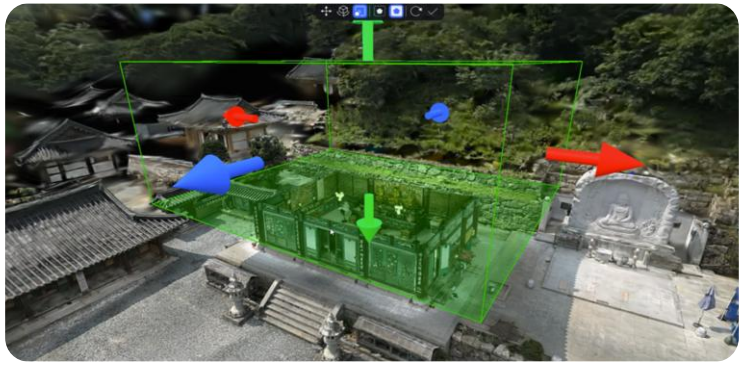
Software

DIMENVUE Edit

DMV Edit is an integrated editing software for high-precision 3D scan data, simplifying post-processing through outlier removal, 2D drawing, and 3D modeling creation, and various format integration features.

▶ Check 3D Point Cloud





On-site centered automation processing

SLAM mapping
One-click loop closure, object removal, and coordinate transformation

Map fusion
Merges multiple scan sessions to complete large-scale maps on site

PPK precision correction
Achieved cm-level global alignment through RTK/GNSS-based PPK application

Quality verification
On-site checkpoint analysis and report generation

Real-time measurement and analysis

Cross-section slicing
Supports structural review with an on-site horizontal/vertical cross-section extraction

Alignment correction
Enhances positional and angular accuracy by coordinate-based alignment

Measurement toolset
Measures points, distance, area, and angles, and supports both metric and imperial units

Volume analysis
Stockpile management and comparative analysis for resource efficiency

Connects to professional workflows

Remote transfer
Supports remote control of on-site scanners and real-time data streaming

Coordinate-system compatibility
Full support for domestic/international coordinate systems and geoid models

PPK precision correction
Supports various types of formats (LAS, E57, RCP, MESH) for immediate connection to BIM/CAD/GIS

Software

DIMENVUE Render

The DMV Render is a rendering software that converts scan data into photorealistic, high-quality 3D models, supporting virtual tour production, BIM integration, and compatibility with major 3D engines like Unity and Unreal, providing an environment optimized for various industry workflows.

▶ Check 3D Rendering

Photoreal conversion and optimization

Photoreal conversion
Reconstructs scan data into realistic 3D scenes

Hybrid rendering
Displays point clouds and meshes together to enhance detail and readability

Performance optimization
Render large datasets smoothly with tiling, LOD, and streaming

Volume analysis
Enhances project compatibility with universal and proprietary format exports, such as Ply and LCC

Analysis and presentation tools

Measurement and annotation
Enhances issue communication with point/distance/area measurement and annotation features

Clipping and cross-sectioning
Uses clipping planes and horizontal/vertical sections to review internal structures

View controls
Improves presentation efficiency with bookmarks, scene transitions, and layer toggles

Quality assistance
Improves visual clarity with noise reduction and unnecessary object cleanup features

Distribution and integrations

Offline packaging
Creates lightweight packages for rapid field/meeting deployment

Web publishing
Accelerate stakeholder collaboration via browser-based share links

Viewer integration
Connects review and collaboration pipelines with package export for DIMENVUE Viewer

Platform compatibility
Expands workflow with BIM, CAD, and 3D engine integration

03

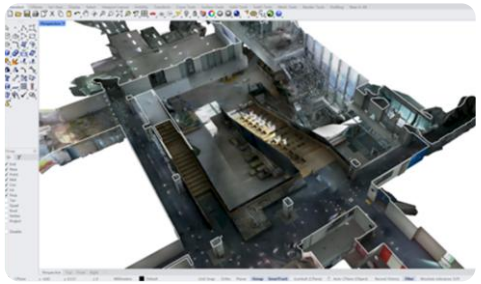
Use Cases

Application Areas

A wide range of industries are actively leveraging spatial data

From BIM design to smart factories, virtual tours, and simulations,
spatial data is actively utilized across industries and serves as a key foundation for digital transformation and smart infrastructure development.

AEC & Construction



BIM & Architectural Design

Generation of precise 3D models based on building blueprints

Construction monitoring & reverse engineering

Support for process management and reverse engineering

Smart Manufacturing & Infrastructure

Smart Factory Development

Establishment of digital twins and monitoring environments for manufacturing facilities

Plant & Energy Management

Precision inspection and maintenance of industrial assets

Culture, Tourism & Content

3D Virtual Tour Production

Recording real spatial 3D data and producing virtual tours

Games & Simulation

Implementation of virtual spaces for games, VR, and cultural content

Public Safety & Urban Management

Disaster & Incident Response

On-site forensics and incident reconstruction

Smart City

Traffic/facility management and urban planning

Use cases

DIMENVUE proven in industrial settings

DIMENVUE has already been applied in various industrial sites, including manufacturing, smart factories, and smart cities, and is promoting practical projects, such as virtual factory construction, 3D modeling production, and digital twin simulation, in collaboration with global companies.

Provides virtual-factory solutions for domestic and global manufacturers

HYUNDAI

LiDAR-based virtual factory construction	>	Supply begins in JUN 2025
DIMENVUE Edit (SW)	>	Sales after development completion in Q3 2025

Technical collaboration for smart-factory and smart-city domains

MEGAZONE CLOUD

MOBILTECH

3D engine-based 3D modeling	>	Collaboration begins in JUL 2025
3D simulation DT construction	>	Integration after development completion in Q3 2025

04

Services

Service Scope

We provide a full-cycle service for 3D data

DEEP IN SIGHT supports the entire process of utilizing 3D data—from equipment sales and rentals to on-site scanning services and SI implementation—tailored to the diverse needs of customers. Optimized solutions are provided for each project stage to ensure efficient operations and cost savings.

Equipment Sales & Rental

- DIMENVUE hardware available for sale and for short-/long-term rental
- Continuous operation purchase or project-based rental options
- Quick on-site application is possible with initial setup and training support by our professional technical team

› **Utilization of the latest equipment without upfront investment costs**

Scanning Services

- On-site 3D data collection by our expert technical team
- Delivery of complete, ready-to-use data outputs without the need for in-house equipment or staff
- High-quality data acquisition within a short period to accelerate project initiation

› **Suitable for one-time projects such as building measurements, cultural heritage recording, and facility inspections**

SI Implementation

- Customizable equipment, software, and data management systems optimized for client environments
- Integrated end-to-end process covering data scanning, storage, editing, and utilization
- Scalable system design with high interoperability

› **Optimized for long-term data management in smart factories, plants, and large-scale facilities**

Differentiation Points

DIMENVUE's differentiated advantages

DIMENVUE goes beyond the limitations of existing fixed and mobile scanners, offering faster speed, more reasonable cost, and broader applicability.
This enables faster and more efficient data capture on-site at project locations.

	Existing Fixed	Existing Mobile	DIMENVUE
Scan Speed	Very Slow	Fast	**Up to 10x faster than fixed**
Price	High price over US$ 64K	High price over US$ 50K	**Mid-low price around US$ 29K**
Features	360° image provided	Point Cloud Data provided	**Point Cloud Data + 3DGS provided simultaneously**
Accuracy	Within 1 cm	Within 2 cm	**Within 3 cm**
RAW Data	Not available	Not available	**RAW Data provided per client requirements**
Key features	Limited usability in complex environments	Lack of universal functionality	**Usable in various environments + Broad 3D-engine integrations**

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See the future with AI camera

Website	e-mail	Contact
https://dinsight.ai/	sales@dinsight.ai	031-724-0501

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