



■ The Leader In LiDAR Industry

# GoldEye II

## 3D LiDAR Modeling System

2020.03 V1.0

## 1. Brief Introduction

"GoldEye II" is a high performance 3D LiDAR system developed by LeiShen Intelligence, which offer fast and easy 3D data collection or 3D image fusion information with high accuracy and high resolution.

"GoldEye II" is integrated by hybrid LiDAR (High density point cloud and the effective points cloud are equivalent to mechanical 64 lines Lidar), IMU (GNSS/INS), camera (option), processing unit and so on. It supports real-time 3D modeling or off-line 3D modeling, targeting for power inspection, disaster emergency response, forestry survey, topographic mapping, high precision map and other mapping applications.

## 2. Configuration

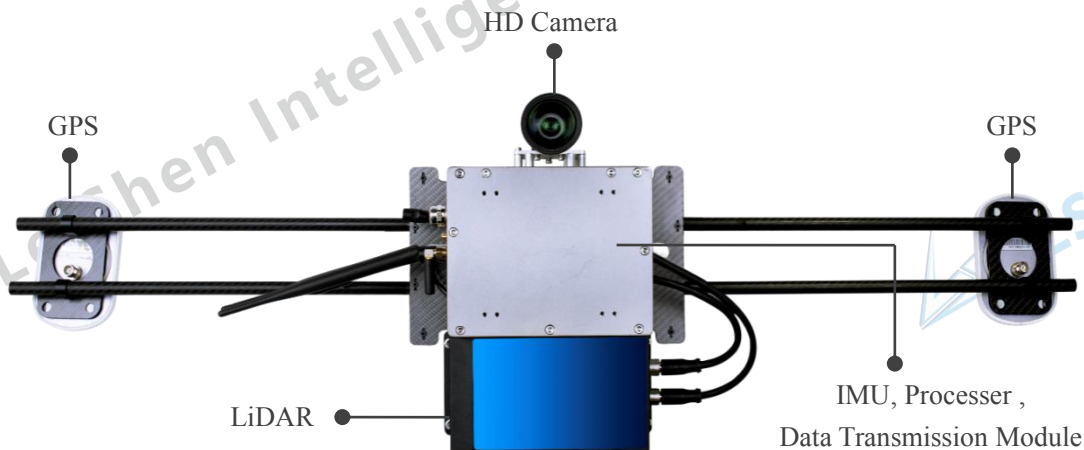
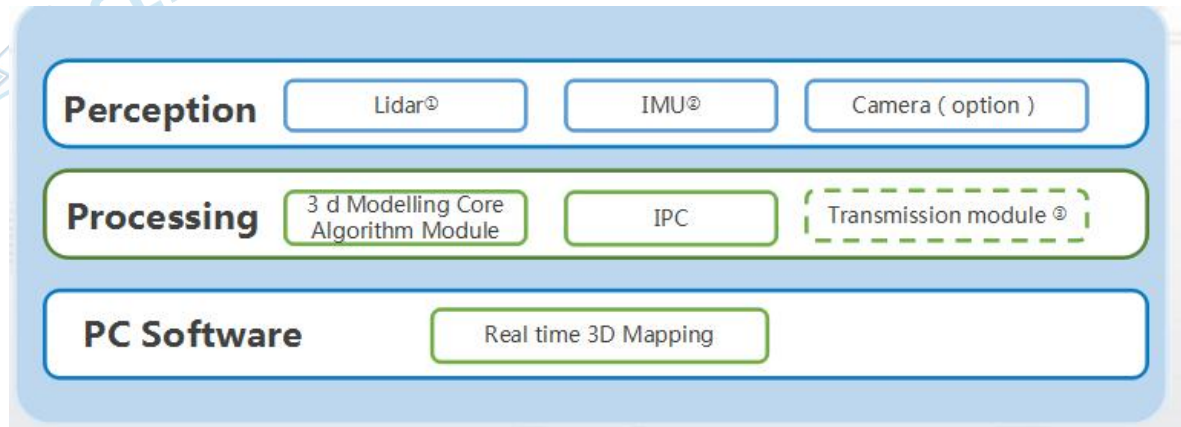


Figure 1 Gold Eye II

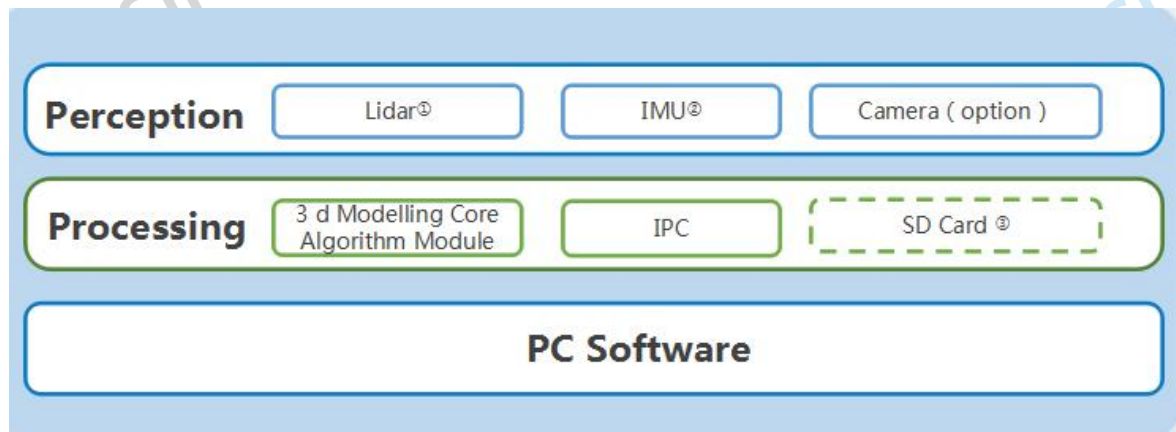
### 2.1 Gold Eyell Real-time System

During the scanning process, the system will measure the environment's coordinates, distance & elevations and display the real-time 3D modeling with true color point could (option) at PC end. Besides, Pos parameters, Equipment status and other information are also shown at PC.



## 2.2 Gold Eyel Off-line System

During the scanning process, the system stores the data collected by LiDAR, camera and IMU into the processor unit, and later exports the data to the PC end or workstation for offline reading and processing. Compared with real-time modeling, offline modeling can carry out multiple pre-processing and large batch of data processing, which provides more possibility for secondary development applications.



## 3. List

LiDAR	Model	MS-CH32 905nm
	Safety	Class 1 (IEC60825-1:2014)
	Max Range	200m at 20% Reflectivity
	Accuracy	±2cm
	Duel Returns	852k Points/Second

	FOV	Horizontal	120°
		Vertical	-6.67~+4.58°
	Resolution	Horizontal	0.045°~ 0.18°
		Vertical	0.33°
	Working Temp		-40℃ ~ 50℃
IP Rating		IP67	
IMU	Position		GPS L1/L2/L2C, GLONASS L1/L2, BeiDou B1/B2
	Freq.		200Hz
	Positional Accuracy		2cm+1ppm (CEP) (RTK)
	Speed Accuracy		0.03 m/s (RMS, GNSS single is good condition)
	Course Angle Accuracy		0.1° (1σ, GNSS single is good condition, Base length≥2m)
	Attitude Angel Accuracy		0.1° (1σ, GNSS single is good condition)
	Working Temp		-40℃ ~ 50℃
IPC	CPU		Intel Core J1900
	Internal Storage Model		DDR3L 4G
	Storage		128G
Transmission module (Real time system optional)	Frequency Range		1.4Ghz
	Bandwidth		10Mhz
	Speed		30Mbps
	Transmission Distance		>3Km
	Working Temp		-20℃ - 50℃
Camera (Option)	Optical Zoom		15 times
	Dynamic Effective Pixels		300w above
	Anti-shake		Optical physics
	Length of lens		12.8-167mm
Software	LiDAR Point Cloud Pre-treatment Software		
	LiDAR Control and Analysis Software		
	Point cloud processing and analysis software		

## 4.Application

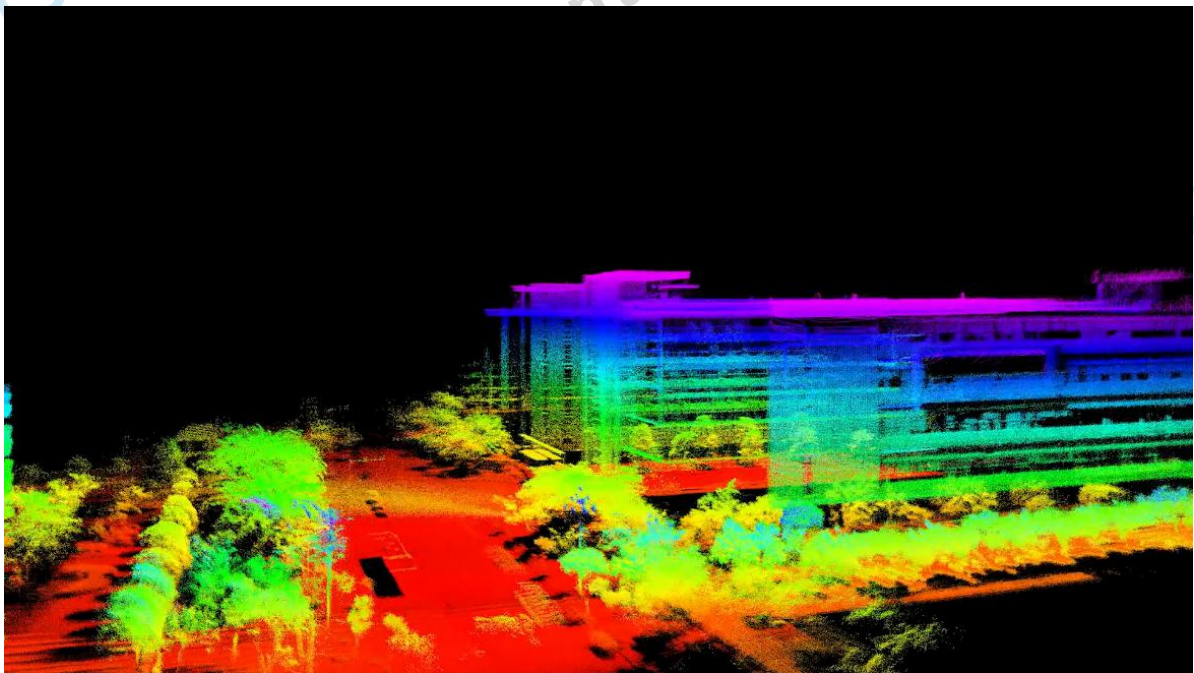
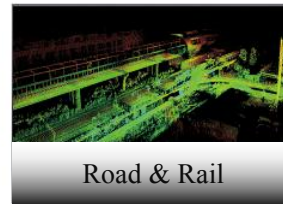
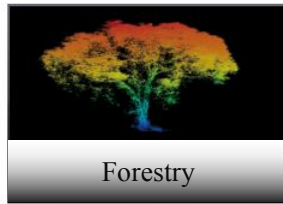
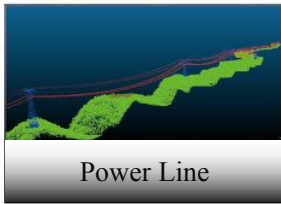


Figure 2 3D Modeling Real-time System (LiDAR)



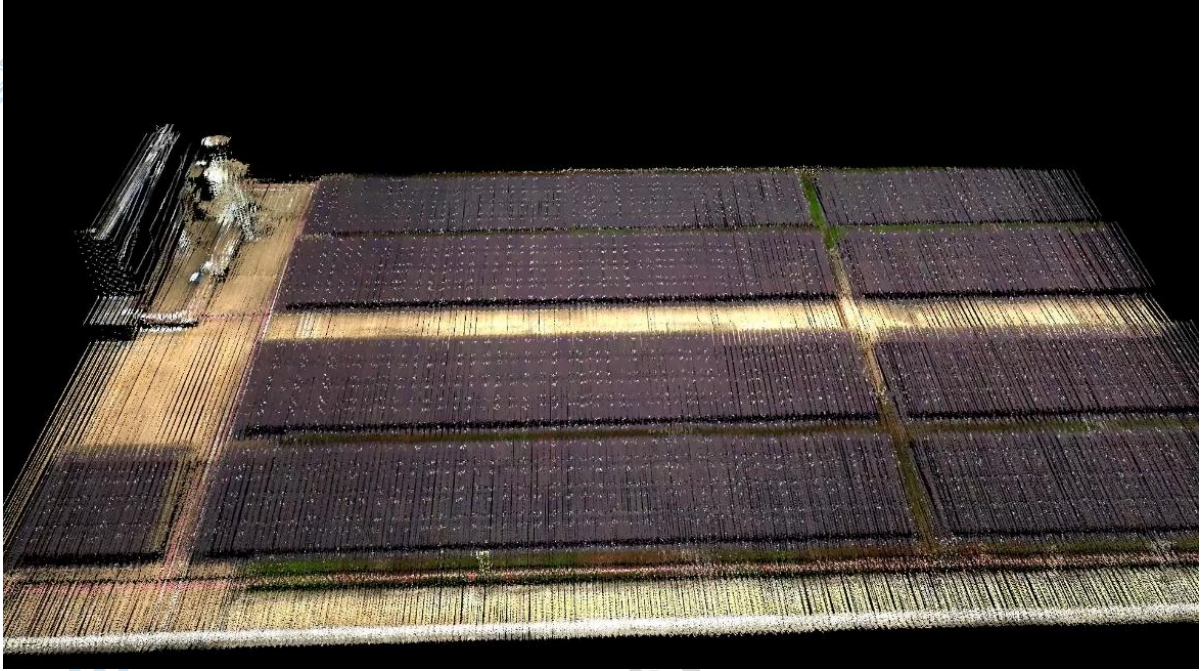


Figure 3 Real-time System (LiDAR + Camera)

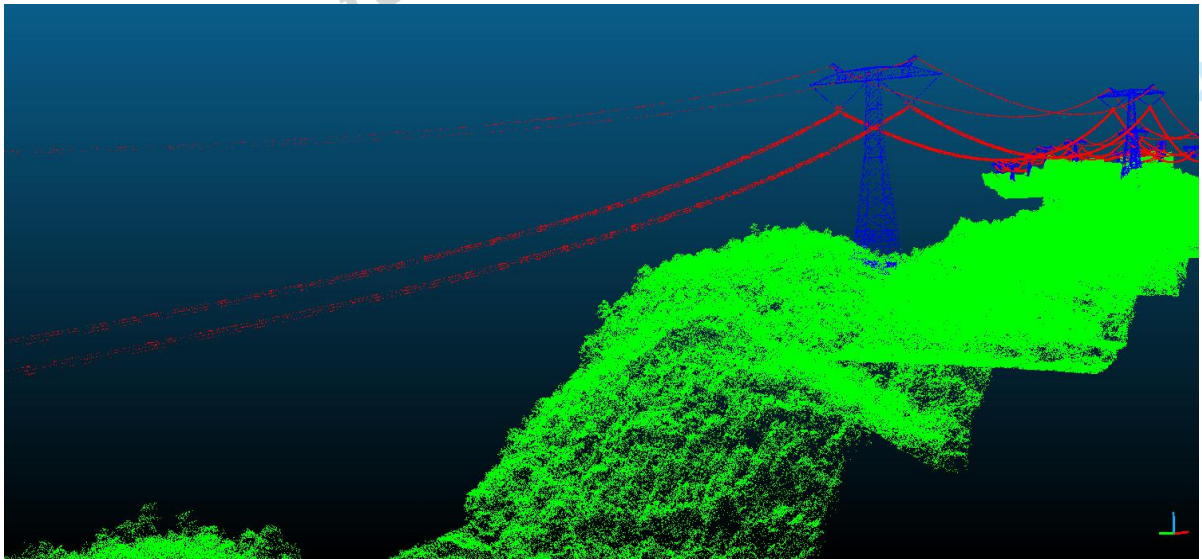


Figure 4 3D Modeling Offline System (LiDAR)