

High-Precision 3D Object Scanner

This high-precision 3D scanner captures detailed object geometry. Its portable design features a small size and footprint, easy disassembly and installation, and convenient portability.



ADDITIONAL IMAGES



Overview

High-Precision 3D Scanning Solution

This portable 3D scanner is designed for high-precision non-contact surface measurement, offering a versatile solution for capturing detailed object geometry. Its compact design allows for easy disassembly and installation, making it highly convenient for professionals who require mobility without sacrificing accuracy. Ideal for industrial design, reverse engineering, and quality control, it provides reliable data for both small components and large-scale sculptures.

Performance Metrics

Key Performance Metrics

0.01 mm

Single Frame Precision

5 s

Scanning Time

50000 h

Light Source Lifetime

Technical Specifications

Product Model	HC 3D Scanner
Single Scanning Area	400x500mm-200x150mm
Single Frame Precision	0.010mm-0.025mm
Point Spacing	0.10-0.20mm
Capacity	400mm-2000mm 100mm-400mm
Light Source	White light / Non-contact Surface Measurement Mode
Data Splicing Way	The world heart automatic splicing
Camera Sensor	Industrial Camera
Camera Lens	12mm / 25mm
Resolution	Industrial lens: 2,000,000 pixels / Industrial lens: 5,000,000 pixels x2
Projector	Norway ASK
Grating System	America DLP digital grating extrapolation method of multiple frequency phase shift
Grating Light Source	LED cold light source, lifetime 50000 hours
Data Output Format	ASC, PLY, STL, OBJ, IGES
Scanning Time	< 5S
Operation System	Windows (64 bit) / Ubuntu
Application	Vehicle spare parts / Large mold sculptures etc. Small and medium sized components such as home appliance, toys, shoe trees, wood carving, etc.

Detailed technical parameters including scanning area, precision levels, and hardware components.

Optical & Sensor System

Component	Specification
Camera Sensor	Industrial Camera (2,000,000 or 5,000,000 pixels x2)
Camera Lens	12mm / 25mm Industrial Lens
Projector	Norway ASK
Grating System	America DLP digital grating (multiple frequency phase shift)
Light Source	White light / LED cold light source
Measurement Mode	Non-contact Surface Measurement
Data Splicing	World heart automatic splicing

Scanning Capabilities

Scanning Range & Precision

- Single Scanning Area: 400x500mm to 200x150mm
- Point Spacing: 0.10mm - 0.20mm
- Object Size Range (Large): 400mm - 2000mm
- Object Size Range (Small): 100mm - 400mm
- Precision Range: 0.010mm - 0.025mm

Software & Connectivity

Operating System

- Windows 7 (64 bit)
- Windows 10

Supported Data Formats

ASC, PLY, STL, OBJ, IGES

Applications

Typical Applications

Vehicle Spare Parts • Large Mold Sculptures • Home Appliance Parts • Shoe Trees & Soles • Wood Carving • CNC Router Integration

Physical Characteristics

Design Features

- Small footprint
- Noiseless operation
- Easy to disassemble and install
- Convenient for transport