

Intelligent Manufacturing in China
Innovation-Driven Development

Formbuilder

#000000 非白三维
3D COMPUTER VISION TECH



About

Black Box 3D has favorable technical personnel from the Microsoft Research Asia and the CAD team of Zhejiang University. The company is a world-leading developer of 3D machine vision system with an independent capacity of full stack development from optics to underlying algorithms. Also, it is a national-level high-tech enterprise with 120+ patents and software copyrights, including 20+ invention patents.

Black Box 3D establishes an international team and a European branch in Finland, which help sell its products in more than 30 countries. Besides, it provides 3D measurement solutions of high precision, stability and robustness for famous customers and their supporting manufacturers such as Bosch, Siemens, Philips, Audi, BMW, Mercedes-Benz, SAIC Volkswagen, Great Wall Motors, Geely, BYD Auto, Yadea, AIMA, SUNRA, Tibet Everest, Aikosolar, Chinese Academy of Sciences and Peking University, etc.

Array

Array Block Education | Array Block Beast

- Fully automatic High-precision Fine detailed
- Dual-axis/single-axis Colored/high-speed

Providing users with a complete solution of automatic 3D scanning system from calibration to editing and processing of data.

Providing users with 3D scanning data of fine details and textures.
Single-axis/dual-axis, colored/high-speed
Different versions of configurations make users accessible to various options suitable for actual application.



Technical specifications

Model	Array Block Educatiom	Array Block Beast
Scanning mode	fully automatic scanning with turntable, free scanning	fully automatic scanning of turntable, fully automatic multi-axis scanning with turntable, professional scanning
Splicing mode	multi-axis scanning and splicing with turntable, automatic splicing with turntable, mark point splicing, manual splicing, feature splicing	
Scanning precision	volumetric accuracy: 0.05mm-0.1mm	volumetric accuracy: 0.05mm; detailed accuracy: 0.05mm
Scanning range	Fully automatic scanning with turntable : 220x220x210mm Fully automatic multi-axis scanning with turntable: 222x222x222mm Free scanning: 740x740x740mm	Fully automatic scanning with turntable : 200x150x150mm Fully automatic multi-axis scanning with turntable: 222x222x222mm Professional scanning: 1200x1200x1200mm
Scanning speed	Fully automatic scanning with turntable: 2min Free scanning: 6s (single scan)	≤0.6s
Texture scanning	24 bit true color, texture export and import are supported, and texture segmentation, editing and modification are available	
Output formats	STL、ASC、OBJ、PLY、VTK、OFF、FB	
Sensor resolution	2 color cameras of 3 megapixels	2 industrial cameras of 1.3 megapixels Dot pitch
Dot pitch		0.10mm-0.15mm
Coding emitter	LED cold light（(Eye-safe)）	
Stand-off distance	400mm	
Working temperature	0℃-40℃	
Weight and dimensions	1.9kg、607x240x214mm	
Voltage of adapter	DC12V, 5A, 60w	
Maximum load bearing capacity of turntable	5kg	
Recommended computer configuration	OS: Windows7（64bit） CPU: inteli5processor GPU: NVIDIAGTX650 or above RAM: 4GB or above	

Product features

Ultra-thin turntable
Fully automatic scanning, intelligent splicing, one-click data output

Smooth docking
Smooth docking with 3D printing

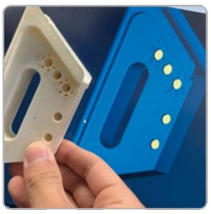
Super dual-axis
Super dual-axisFully automatic dual-axis turntable for 3D scanning of different dimensions and precision with one click

Fully automated
Fully automated splicing with turntable

More details
High precision makes multi-angle scanning without any omitting available

Ultra high-speed
Faster scanning saves more time

Application scenarios


Industrial small part


Cultural relics


Designer–assisted design


3D printing


Footwear scanning


Reverse engineering


Product metrics


Product metrics


Experimental teaching


Toys and garage kits


STEAM education


3D maker education