



# **HYPERSCAN** Smart Optical Tracking 3D Scanner

TRACK FURTHER, SCAN BETTER





# HYPERSCAN

## Smart Optical Tracking 3D Scanner

HYPERSCAN series, smart optical tracking 3D scanner can scan part completely without placing any targets on surface, insensitive to the environment factors makes it possible to scan part in the workshop condition directly.

Thanks to further tracking range, higher accuracy, faster scanning speed and lighter design, the performance of new HYPERSCAN series is even more powerful to use in field of automotive, heavy industry, casting mold and other medium-large size part.

## HYPERSCAN Series

### HYPERSCAN

Smart Optical 3D Scanner

Faster scanning speed, Higher accuracy, supports global and handy scanning mode.



### ZG-TRACK

Smart Optical Tracker

Thanks to built-in smart processing unit, AtlaSight, the accuracy of dual cameras is improved significantly. With real-time dynamic tracking ability, ZG-TRACK is insensitive to environment factors like vibration and temperature.



## TRACK FURTHER, SCAN BETTER



100m<sup>3</sup>  
Max. Measuring Volume



0.05mm  
Volumetric Accuracy  
(Within 4.2m tracking distance)

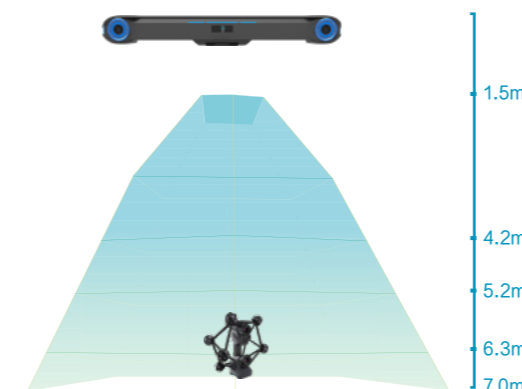


3,150,000 measurements/s  
Fastest Scanning Speed



37% off  
ZG-Track lightweight design

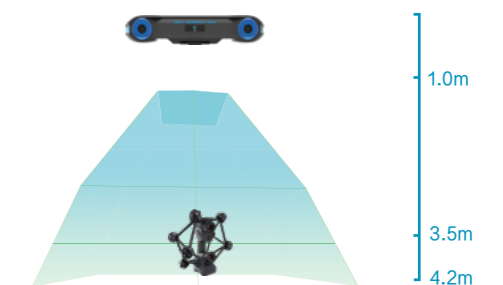
### HYPERSCAN SUPER



100 m<sup>3</sup>

With max. 7-meter tracking range, **HYPERSCAN SUPER** can secure higher accuracy in large volume scanning

### HYPERSCAN ULTRA



22 m<sup>3</sup>

Thanks to mini-size & lightweight design and 4.2-meter tracking range, **HYPERSCAN ULTRA** is very powerful to challenge scanning job in limited space with great efficiency.



## HYPERSCAN Highlights



### Higher Accuracy

Thanks to great evolution in optical hardware & software updates, volumetric accuracy is elevated to new level and up to 0.05mm.



### Faster Scanning Speed

Scanning speed up to 3,150,000 measurements/s, with 7-meter tracking range, scanning efficiency is improved significantly for large part.



### True Portability

One-box design for scanner & optical tracker is truly portable to scan in limited space and travel anywhere.



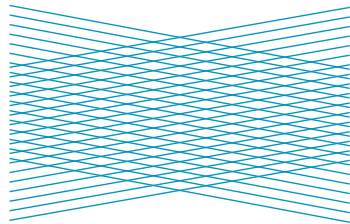
### Automated Solution

Perfect to integrate with different robots for large part automated scanning solution.

## HYPERSCAN Functionality

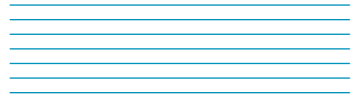
### Standard Scanning

34 Blue Laser Lines improves scanning efficiency significantly.



### Fine-detail Scanning

7 Parallel blue laser lines to feature more details for small part.



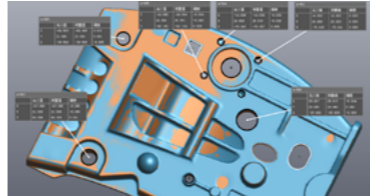
### Edge Detection

Single laser line to scan trimline of thin part directly with innovative edge detection functionality with great efficiency.



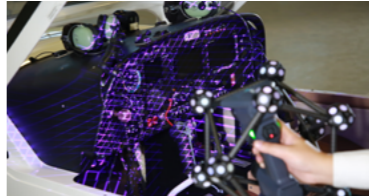
### Hole Flash Capture

To equip our patented Hole Flash Capture technology into dynamic tracker scanning system, we innovate the hole measurement accessories and integrate the function of automatic CAD alignment & RPS alignment in our software.



### Hybrid Scanning

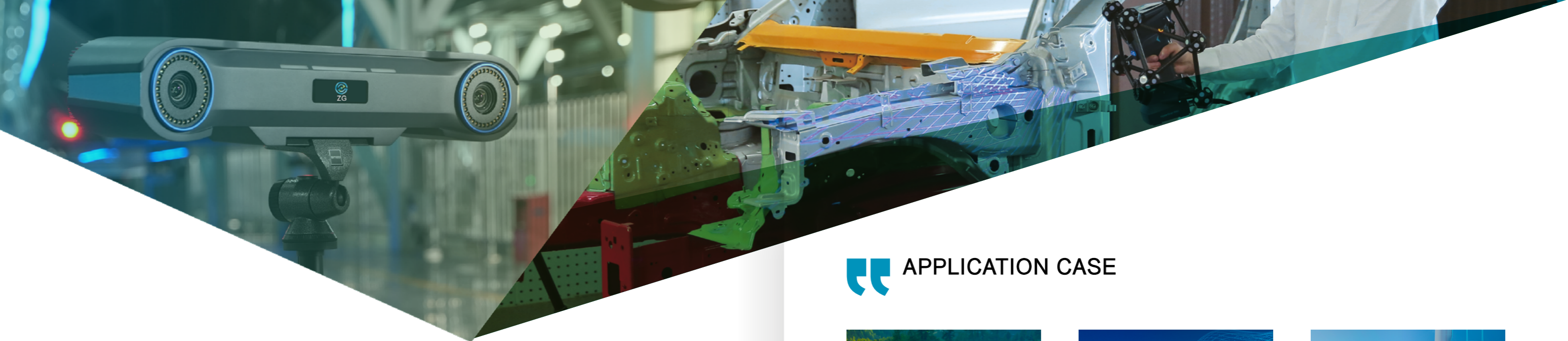
HyperScan series supports global scanning and handy scanning mode under the same coordination, and the dual scanning mode can be switched real-time by Intelligent interactive system, which is more adaptable to large and complex workpiece scanning.



### Multi-tracker Scanning Solution

Multiple trackers with single scanner to extend measurement volume dramatically without any leapfrogs. Multiple trackers with multiple scanners to increase the scanning efficiency dramatically and satisfy offline measurement requirements perfectly.

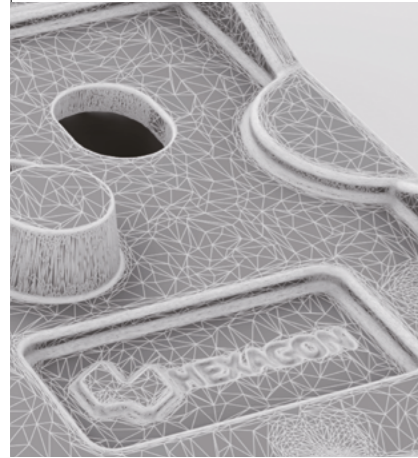




## HYPERSCAN Software

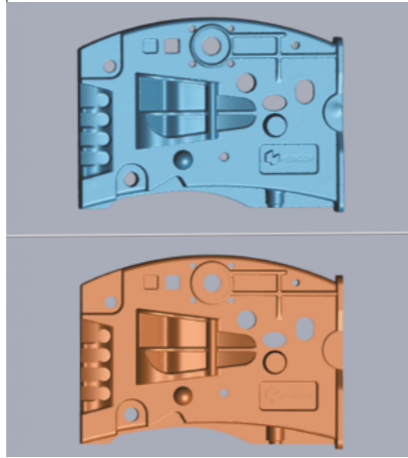
### Instant Mesh and Local Resolution

To improve quality of scan data and details, while it does reduce the size of scan data & processing time and improve working efficiency dramatically.



### Built-in Measurement Toolbox

Built-in measurement toolbox support various dimensions and features measurements, also provide 3D comparison, data annotation and inspection report generation.



### Intelligent Interactive System

Simple operation with built-in interactive buttons in scanner to choose scanning mode, calibrate and process scan data by simple buttons operations.



## HYPERSCAN Accessory



### ZG-PROBE Portable 3D Probing System

- To provide portable probing system working with optical tracker.
- Complementary part to 3D scanning functionality.
- To probe datum easily in complex application.



### FREEBOX Wireless Scanning Module

- Compatible to **HYPERSCAN** series portfolio.
- To adopt WIFI 5G technology to realize wireless transmission and scan data post-processing.
- Beneficial for large part & long-range scanning outdoor.

## APPLICATION CASE



### AUTOMOTIVE

- Reverse engineering
- Competitive product analysis
- Automotive repacking
- Interior customization
- Modeling and design



### AEROSPACE

- Rapid prototyping
- Quality control & inspection
- (MRO) wear and tear analysis
- Aerodynamics
- Stress analysis



### HEAVY INDUSTRY

- Quality control
- Reverse engineering
- MRO and wear analysis
- Mechanical & tooling design and modification
- OEM and parts recycling



### MOLD & CASTING

- Quality inspection & control
- Virtual assembly
- Wear and tear analysis
- Reverse engineering
- Industrial fixture design & modification



### CULTURE & EDUCATION

- Cultural relic
- Art
- Sculpture
- Education & Research



### MEDICAL

- Orthosis & prosthesis design and manufacture
- Plagiocephaly treatment
- Wound monitoring
- Biological specimen



	HYPERSCAN DX-B	HYPERSCAN ULTRA	HYPERSCAN SUPER
MEASUREMENT RATE (STANDARD)	2,200,000 measurements/s	3,150,000 measurements/s	3,150,000 measurements/s
MEASUREMENT RATE (FINE DETAIL)	1,200,000 measurements/s	1,300,000 measurements/s	1,300,000 measurements/s
ACCURACY-STANDARD	Up to 0.025mm	Up to 0.025mm	Up to 0.025mm
VOLUMETRIC ACCURACY	Tracking range 3.5m	0.064mm ( 9.6m <sup>3</sup> )	0.06mm ( 13m <sup>3</sup> )
	Tracking range 4.2m	0.078mm ( 17.6m <sup>3</sup> )	0.075mm ( 22m <sup>3</sup> )
	Tracking range 5.2m	—	—
	Tracking range 6.3m	—	—
	Tracking range 7m	—	0.14mm ( 100m <sup>3</sup> )
VOLUMETRIC ACCURACY (Working with PHOTOSHOT MAX)	0.044+0.015mm/m	0.044+0.015mm/m	0.03+0.015mm/m
RESOLUTION	0.02mm	0.02mm	0.02mm
LASER SOURCE	26 Blue Laser Lines+Extra Single Laser Line+7 Parallel Blue Laser Lines	34 Blue Laser Lines+Extra Single Laser Line+7 Parallel Blue Laser Lines	34 Blue Laser Lines+Extra Single Laser Line+7 Parallel Blue Laser Lines
SCANNING AREA	Up to 550×500mm	Up to 600×500mm	Up to 600×500mm
STAND-OFF DISTANCE (STANDARD)	350mm	350mm	350mm
DEPTH OF VIEW	400mm	400mm	400mm
TRACKER FREQUENCY	90Hz	90Hz	90Hz
PROBING ACCURACY	0.03mm	0.03mm	0.02mm
HOLE FLASH CAPTURE ACCURACY	0.03mm	0.03mm	0.02mm
PART SIZE RANGE (RECOMMENDED)	0.1~8m	0.1~8m	0.1~12m
HYPERSCAN SCANNER WEIGHT	1.5kg	1.5kg	1.5kg
HYPERSCAN SCANNER DIMENSION	190×310×310mm	190×310×310mm	190×310×310mm
ZG-TRACK WEIGHT	9kg	5.7kg	7.4kg
ZG-TRACK DIMENSION	1030×195×140mm	678×159×125mm	1078×159×125mm
OPERATING TEMPERATURE	-10~40°C	-10~40°C	-10~40°C
OPERATING HUMIDITY (NON-CONDENSING)	10~90%RH	10~90%RH	10~90%RH
CONNECTION STANDRAD	USB3.0	USB 3.0/Ethernet	USB 3.0/Ethernet

	HYPERSCAN DX-B	HYPERSCAN ULTRA	HYPERSCAN SUPER
OUTPUT FORMAT	.asc, .stl, .obj, .ply, .txt, .xyz	.asc, .stl, .obj, .ply, .txt, .xyz	.asc, .stl, .obj, .ply, .txt, .xyz
COMPATIBLE SOFTWARE	3D Systems (Geomagic Solutions), InnovMetric Software (PolyWorks), Dassault Systems (CATIA V5 and SolidWorks), PTC (Pro/ ENGINEER), Autodesk (Inventor, Alias, 3ds Max, Maya, Softimage), Siemens (NX and Solid Edge) etc.		
PATENT	CN106767895B, CN106204544B, CN106228603B, CN108805976B, CN108759668B, CN109099839B, CN109102548B, CN305459208S, CN110345866B, CN305868718S, CN111486801B, CN111595257B, CN212539085U, CN213481239U, CN212539083U, CN213149247U, CN212539143U, CN212658242U, CN213147740U, CN306620676S, CN112697091B, CN214924384U, CN213960509U, CN112880557B, CN214224107U, CN214893132U, CN216869473U, CN218511698U, CN114943822B, CN115471404B, CN218728024U, CN308166573S		

	FREEBOX-S	FREEBOX-T
WEIGHT	1.0kg	2.7kg
DIMENSION	164×144×66mm	214×146×102mm
BATTERY CAPACITY	3400mAh	6800mAh
OPERATING TEMPERATURE	-10~40°C	-10~40°C
OPERATING HUMIDITY (NON-CONDENSING)	45~75%RH	45~75%RH
WORKING TIME	3 hours	3 hours
WIFI STANDARD	WIFI 5G 802.11ac	WIFI 5G 802.11ac



## ZG TECHNOLOGY CO., LTD.

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