RVC Series
3D Area Scanner
RVC-P series

▼ RVBUST

RVC-P3270
High Precision
3D Area Scanner

RVC-P3270 high-precision 3D area scanner, single-point repeatability of up to 0.012mm, with built-in self-developed 3D imaging algorithms, make it resistance to ambient light excellently and operate more stable. The scanner can be widely used in 3C digital, home appliances, automotive parts production process, such as positional, gap, surface difference inspection scenarios.

Aircraft aluminum fuselage for all-around protection

Waterproof level greatly improved

Dust proof level greatly improved

Passed professional vibration test

Gigabit Ethernet port data transfer

Integrated Body
stable and solid

Fan-free heat dissipation Design
Weight loss, noise reduction, smaller volume

Equipped with high-resolution lens
Reduce the image noise of point cloud

Highlighted 3D Module
Stabilization of light output to achieve a stable and reliable scanning

High environmental resistance performance fuselage
Aviation aluminum alloy shell
IP 65 level protection

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Core Advantages

Ultra-high precision
Self-developed machine vision high accuracy calibration algorithm, single point repeatability up to 0.012mm.

Stable and reliable
IP65 rated and tested for stable operation in harsh environments.

Anti ambient light
Self-developed dynamic streak structured light technology, excellent imaging effect on bright workpieces.
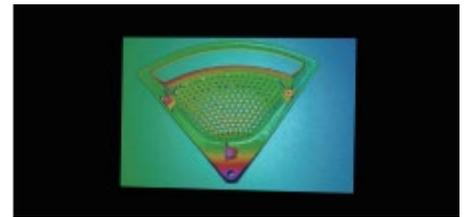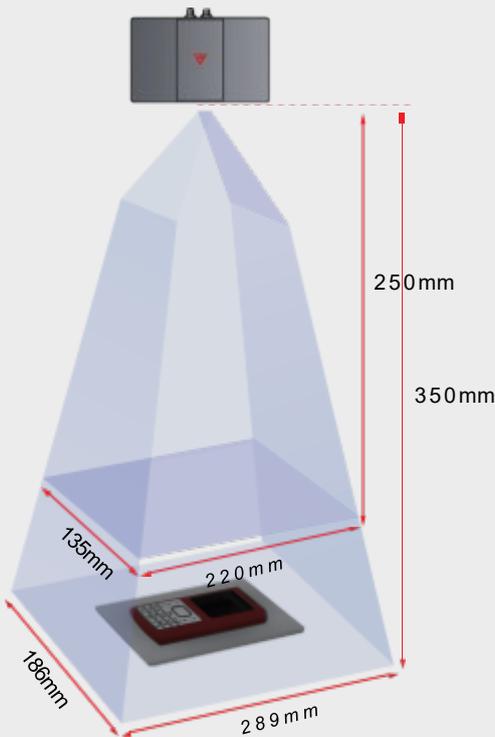
Point cloud display
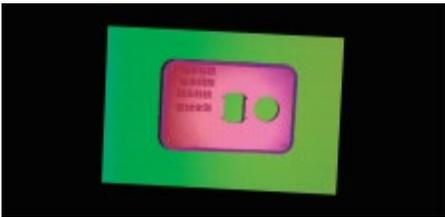
glue ring inspection of structural parts
point cloud
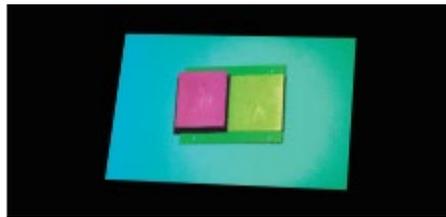
Scratch detection of metal parts
point cloud

notch inspection of structural components
point cloud

Product reference data	
model	**RVC-P3270**
Minimum shooting time (sec / frame)	1.43
Resolution (MP)	3.2 binocular
Operating distance range (mm)	250~350
Near field of view (FOV) (mm)	220*135 @ 250
Far field of view (FOV) (mm)	289*186 @ 350
XY directional resolution (mm)	0.11~0.15
Z-axis single-point repetition accuracy (mm)	0.012~0.020
Repeat accuracy of the Z-axis region (mm)	0.0004~0.0012
illuminant source	RGB LED
Communication interface	Gigabit Ethernet
scanner weight (kg)	1.6
scanner size (mm)	250*135*57
Operating voltage / current	DC 24V/3.75A
Levels of protection	IP65
Operating temperature (°C)	0~45
Operating Humidity (% RH)	20~80 (no condensation)
Standard fitting	power supply adapter, power supply cord, data cable
Whether the third-party development is supported	yes
Supported development language	C/C++/C#/Python
Supported development platform	Linux/Windows
Adapt to the third-party software library	Halcon/OpenCV/Open3D/PCL/VisionPro

RVC-P5330

High Precision
3D Area Scanner

RVC-P5330 high-precision 3D area scanner is suitable for assembling, gluing, grinding, welding and other high-precision visual positioning guidance scenes, also used for detecting surface defects, structural dimensions and other high-precision inspection. It can output high-precision point clouds of all kinds of complex workpieces, metals, plastics and other typical objects, to meet the needs of most industrial applications.

Aircraft aluminum fuselage for all-around protection

Waterproof level greatly improved

Dust proof level greatly improved

Passed professional vibration test

Gigabit Ethernet port data transfer

Integrated Body
stable and solid

Fan-free heat dissipation Design
Weight loss, noise reduction, smaller volume

Equipped with high-resolution lens
Reduce the image noise of point cloud

Highlighted 3D Module
Stabilization of light output to achieve a stable and reliable scanning

High environmental resistance performance fuselage
Aviation aluminum alloy shell IP 65 level protection

Core Advantages

Ultra-high precision

Equipped with a 5-megapixel binocular lens, the single-point repeatability can be up to 0.025mm, which meets the customer's demand for high-resolution screen output such as X, Y direction measurement or positioning.

Anti ambient light

The self-developed dynamic stripe structured Light technology can detect a variety of materials at the same time, which greatly improves the ability to resist interference from ambient light and creates a more complete image.
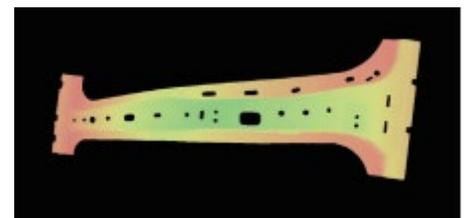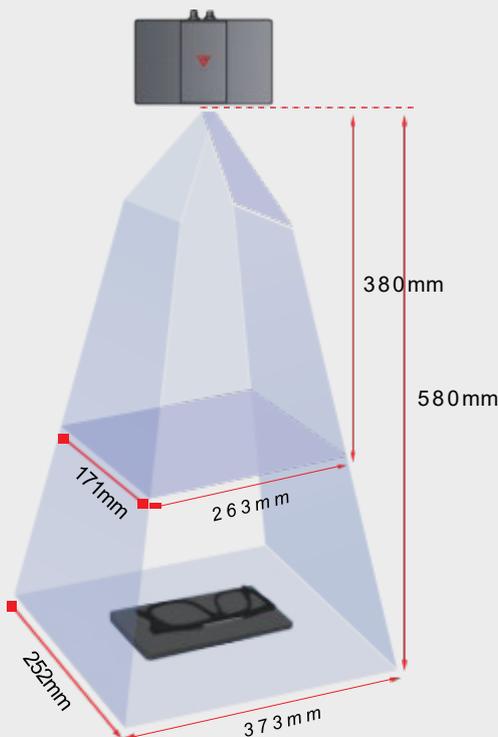
Point cloud display
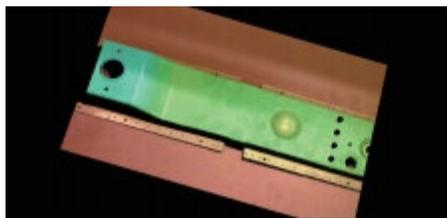
Sheet metal parts gluing inspection point cloud

steel plate workpiece point cloud

Automobile B-pillar workpiece point cloud

380mm

580mm

171mm

263mm

252mm

373mm

Product reference data	
model	RVC-P5330
Minimum shooting time (sec / frame)	2.0
Resolution (MP)	5.0 binocular
Operating distance range (mm)	380~580
Near field of view (FOV) (mm)	263*171@380
Far field of view (FOV) (mm)	373*252@580
XY directional resolution (mm)	0.11~0.17
Z-axis single-point repetition accuracy (mm)	0.025~0.046
Repeat accuracy of the Z-axis region (mm)	0.0017~0.0044
illuminant source	blue LED
Communication interface	Gigabit Ethernet
scanner weight (kg)	1.7
scanner size (mm)	250*135*57
Operating voltage / current	DC 24V/3.75A
Levels of protection	IP65
Operating temperature (°C)	0~45
Operating Humidity (% RH)	20~80 (no condensation)
Standard fitting	power supply adapter, power supply cord, data cable
Whether the third-party development is supported	yes
Supported development language	C/C++/C#/Python
Supported development platform	Linux/Windows
Adapt to the third-party software library	Halcon/OpenCV/Open3D/PCL/VisionPro

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RVC-P2600
High Precision
3D Area Scanner

RVC-P2600 high-precision 3D area scanner with binocular lens, compact structure design, and stable performance. RVC-P2600 is waterproof, dustproof, high temperature resistance, adapt to the factories environments full of dust,water vapor, and oil stains. The scanner used widely in welding, cutting, grinding, spraying, positioning assembly, gluing and other high-precision visual positioning scenes.

Aircraft aluminum fuselage for all-around protection

Waterproof level greatly improved

Dust proof level greatly improved

Passed professional vibration test

Gigabit Ethernet port data transfer

Integrated Body
stable and solid

Fan-free heat dissipation Design
Weight loss, noise reduction, smaller volume

Equipped with high-resolution lens
Reduce the image noise of point cloud

Highlighted 3D Module
Stabilization of light output to achieve a stable and reliable scanning

High environmental resistance performance fuselage
Aviation aluminum alloy shell
IP 65 level protection

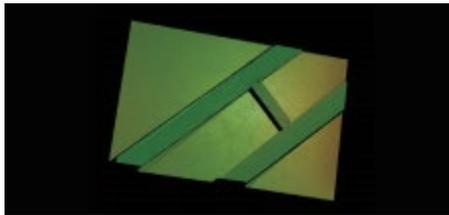## Core Advantages

high protection

Aircraft aluminum unibody design, IP65 waterproof and dustproof.
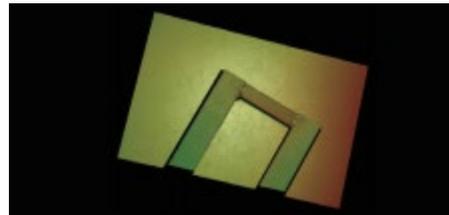
Anti ambient light

The self-developed Dynamic Stripe Structured Light technology can detect a variety of materials at the same time, which greatly improves the ability to resist interference from ambient light and creates a more complete image.
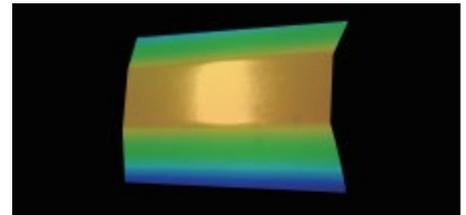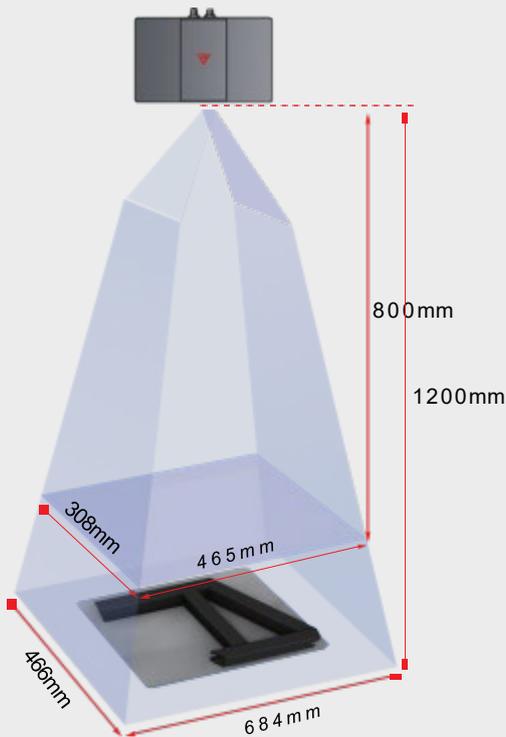
Point cloud display

Welded workpiece point cloud

Welded workpiece point cloud

Large vehicle painting guide point cloud

800mm

1200mm

308mm

465mm

466mm

684mm

Product reference data	
model	RVC-P2600
Minimum shooting time (sec / frame)	1.42
Resolution (MP)	1.6 binocular
Operating distance range (mm)	800~1200
Near field of view (FOV) (mm)	465*308@800
Far field of view (FOV) (mm)	684*466@1200
XY directional resolution (mm)	0.35~0.52
Z-axis single-point repetition accuracy (mm)	0.106~0.348
Repeat accuracy of the Z-axis region (mm)	0.010~0.026
illuminant source	RGB LED
Communication interface	Gigabit Ethernet
scanner weight (kg)	1.7
scanner size (mm)	220*135*57
Operating voltage / current	DC 24V/3.75A
Levels of protection	IP65
Operating temperature (°C)	0~45
Operating Humidity (% RH)	20~80 (no condensation)
Standard fitting	power supply adapter, power supply cord, data cable
Whether the third-party development is supported	yes
Supported development language	C/C++/C#/Python
Supported development platform	Linux/Windows
Adapt to the third-party software library	Halcon/OpenCV/Open3D/PCL/VisionPro

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RVC-P3600
High Precision
3D Area Scanner

RVC-P3600 high-precision 3D area scanner ,binocular structured light technology, single-point repeatability up to 0.06mm, stable performance, waterproof, dustproof, high temperature resistant, adaptable to large amount of dust, water vapor, oil pollution plant environment.Waterproof, dustproof, high temperature resistant, adaptable to large amount of dust, water vapor, oil pollution of the plant environment, widely used in gripping, cutting, sanding, spraying, positioning assembly, gluing and other high-precision visual positioning scenarios.

Aircraft aluminum fuselage for all-around protection

Waterproof level greatly improved

Dust proof level greatly improved

Passed professional vibration test

Gigabit Ethernet port data transfer

Integrated Body
stable and solid

Fan-free heat dissipation Design
Weight loss, noise reduction, smaller volume

Equipped with high-resolution lens
Reduce the image noise of point cloud

Highlighted 3D Module
Stabilization of light output to achieve a stable and reliable scanning

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Aviation aluminum alloy shell
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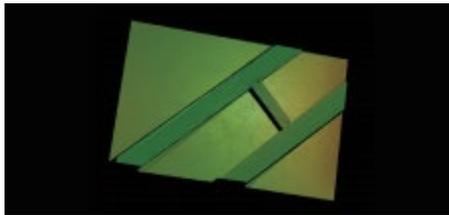## Core Advantages

high protection

Aircraft aluminum unibody design, IP65 waterproof and dustproof.
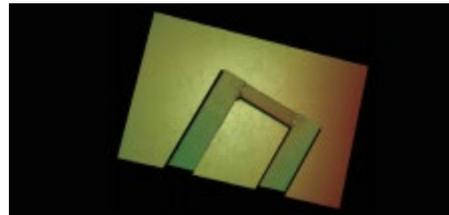
Anti ambient light

The self-developed Dynamic Stripe Structured Light technology can detect a variety of materials at the same time, which greatly improves the ability to resist interference from ambient light and creates a more complete image.
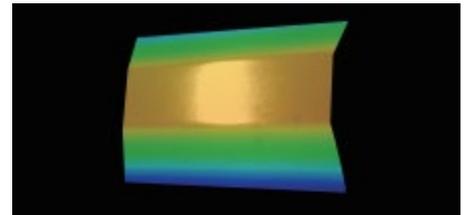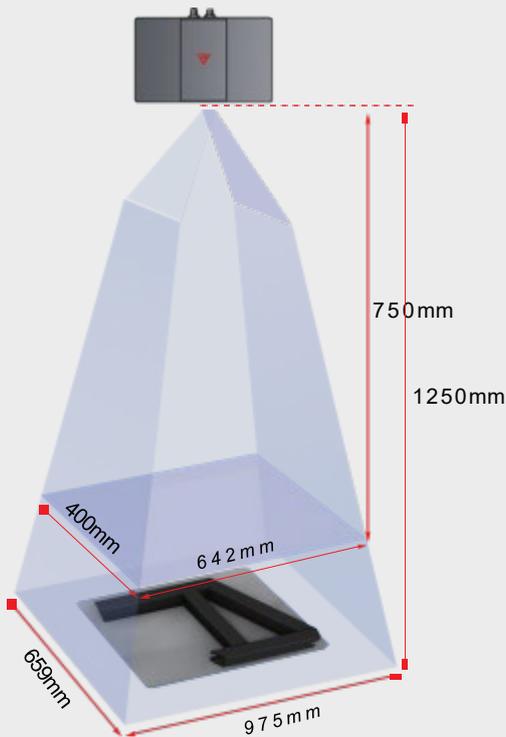
Point cloud display

Welded workpiece point cloud

Welded workpiece point cloud

Large vehicle painting guide point cloud

Product reference data	
model	RVC-P3600
Minimum shooting time (sec / frame)	1.8
Resolution (MP)	3.2 binocular
Operating distance range (mm)	750~1250
Near field of view (FOV) (mm)	642*400@750
Far field of view (FOV) (mm)	975*659@1250
XY directional resolution (mm)	0.32~0.54
Z-axis single-point repetition accuracy (mm)	0.06~0.24
Repeat accuracy of the Z-axis region (mm)	0.004~0.009
illuminant source	RGB LED
Communication interface	Gigabit Ethernet
scanner weight (kg)	2.25
scanner size (mm)	220*135*57
Operating voltage / current	DC 24V/3.75A
Levels of protection	IP65
Operating temperature (°C)	0~45
Operating Humidity (% RH)	20~80 (no condensation)
Standard fitting	power supply adapter, power supply cord, data cable
Whether the third-party development is supported	yes
Supported development language	C/C++/C#/Python
Supported development platform	Linux/Windows
Adapt to the third-party software library	Halcon/OpenCV/Open3D/PCL/VisionPro

750mm
1250mm
400mm
642mm
659mm
975mm

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RVC-P31300&P32200
Medium Large View
3D Area Scanner

RVC-P31300&P32200 medium and large field of view 3D industrial cameras, with large field of view, high precision, fast imaging speed and excellent resistance to ambient light, can take photos of a large number of complex structure, tightly stacked, disorderly placement of various types of objects and output high-quality 3D point cloud datas to guide the robot to complete the disorderly grasping, material sorting, loading and unloading, depalletizing, spraying of various types of all sizes workpieces. which is widely used in various fields such as automotive manufacturing, logistics, packaging, electronics, heavy machinery, food and home appliances.

Aircraft aluminum fuselage for all-around protection

Waterproof level greatly improved

Dust proof level greatly improved

Passed professional vibration test

Gigabit Ethernet port data transfer

Integrated Body
stable and solid

Fan-free heat dissipation Design
Weight loss, noise reduction, smaller volume

Equipped with high-resolution lens
Reduce the image noise of point cloud

Highlighted 3D Module
Stabilization of light output to achieve a stable and reliable scanning

High environmental resistance performance fuselage
Aviation aluminum alloy shell
IP 65 level protection

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Core Advantages

Higher precision

The single-point repeatability of up to 0.1mm realizes high-precision shooting with a large field of view and a long distance, making it easy to deal with a wide range of workpieces with complex structures and tightly stacked workpieces.

Multi-version selection

Provide blue/white light options to meet customers' multi-scene needs.

Anti ambient light

The self-developed Dynamic Stripe Structured Light technology can detect a variety of materials at the same time, which greatly improves the ability to resist interference from ambient light and creates a more complete image.
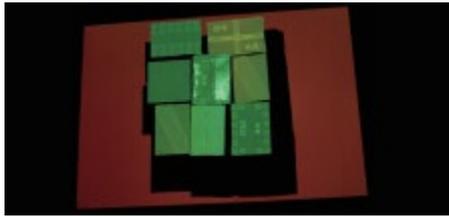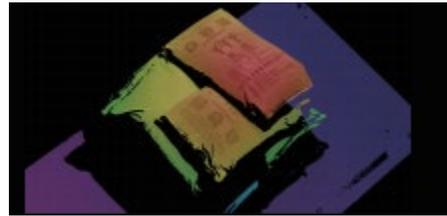
Greater Vision

2.5*1.6 @ 3.3 meters large field of view, 1.3 meters large depth of field, easy to cover a variety of application scenarios.

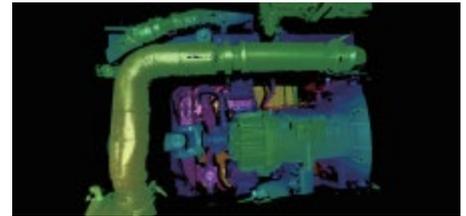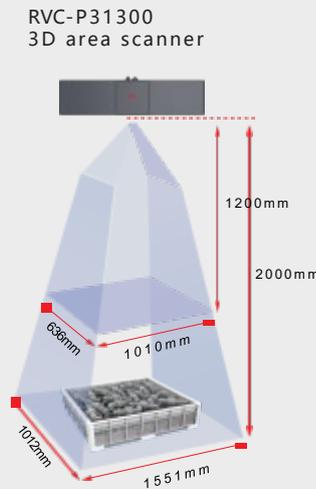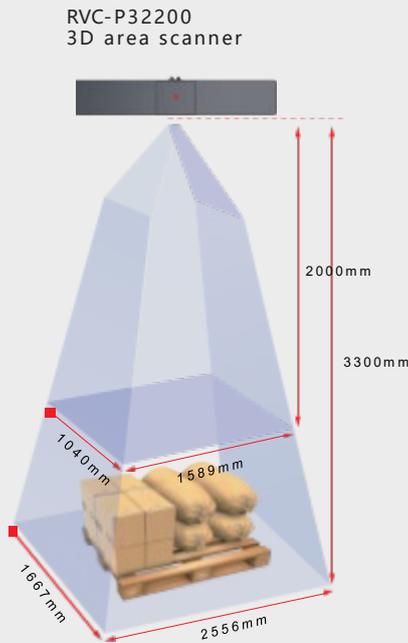## Point cloud display

Various carton point cloud

Depalletizing of soft packages point cloud

Automotive chassis components point cloud

RVC-P32200
3D area scanner

2000mm
3300mm
1040mm
1589mm
1667mm
2556mm

RVC-P31300
3D area scanner

1200mm
2000mm
636mm
1010mm
1012mm
1551mm

Product reference data		
model	RVC-P32200	RVC-P31300
Minimum shooting time (sec / frame)	1.8	1.8
Resolution (MP)	3.2 binocular	3.2 binocular
Operating distance range (mm)	2000~3300	1200~2000
Near field of view (FOV) (mm)	1589*1040@2000	1010*636@1200
Far field of view (FOV) (mm)	2556*1667@3300	1551*1012@2000
XY directional resolution (mm)	0.85~1.5	0.5~0.7
Z-axis single-point repetition accuracy (mm)	0.22~0.77	0.10~0.46
Repeat accuracy of the Z-axis region (mm)	0.004~0.03	0.008~0.019
illuminant source	4.0	2.6
Communication interface	760*135*58	560*135*58
scanner weight (kg)	RGB LED	
scanner size (mm)	Gigabit Ethernet	
Operating voltage / current	DC 24V/3.75A	
Levels of protection	IP65	
Operating temperature (°C)	0~45	
Operating Humidity (% RH)	20~80 (no condensation)	
Standard fitting	power supply adapter, power supply cord, data cable	
Whether the third-party development is supported	yes	
Supported development language	C/C++/C#/Python	
Supported development platform	Linux/Windows	
Adapt to the third-party software library	Halcon/OpenCV/Open3D/PCL/VisionPro	