Vizum

ViEye® 620PD

Industrial line laser 3D camera

- High Precision and High Frame Rate
- Strong Light Resistence and Glare Resistence
- Large Depth of Field and Wide Field of View

www.vizumtech.com

ViEye® Industrial-Grade Line Laser 3D Camera is an active binocular stereo vision 3D camera product designed for machine vision applications. It can quickly generate result data and information such as point cloud data models, RGBD data, depth maps, grayscale maps, and color maps.

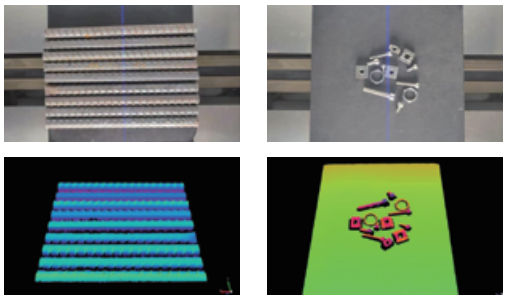
The ViEye Camera features a robust and durable design, facilitating easy installation on robotic arms. Meanwhile, it is adaptable to a variety of complex environments and still supports high-precision modeling in scenarios such as strong light, reflections, and light absorption by black objects.

Embedded with a variety of application-oriented intelligent algorithms, the ViEye Camera is widely used in industrial scenarios including auxiliary stereo positioning and guidance, object flow monitoring and statistics, object surface inspection, and object counting.

Product Features

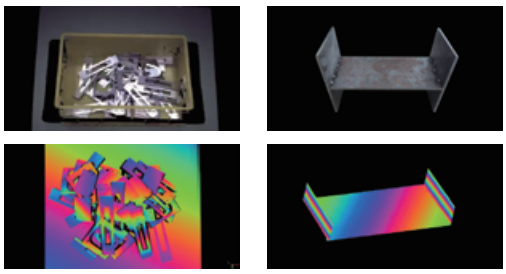
1 Resistant to strong light, anti-glare, and anti-absorption, adapting to various com-plex environments .

- Supports high-precision modeling in bright environments up to 480,000 Lux.
- Supports noise-free modeling of objects with reflective surfaces and polished materials.
- Black light-absorbing material on object surface for flawless modeling



2 High precision and high frame rate, improving positioning accuracy.

- Adopts a high-resolution image sensor, enabling the output of high-precision point clouds.
- Employs a global shutter sensor, featuring high frame rate line scanning capability.
- High spatial positioning accuracy, meeting the demand for fine-grained scene detection.



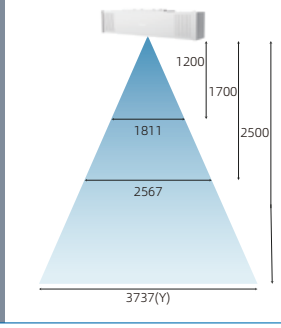
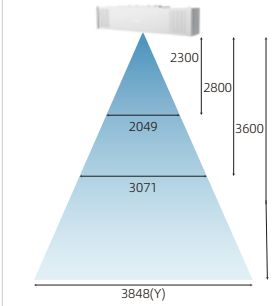
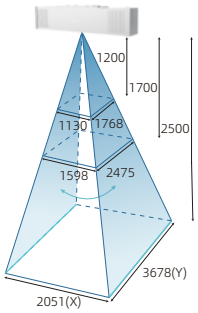
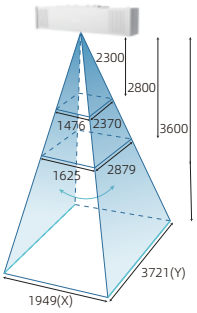
3 Large depth of field and wide field of view.

- Ultra-wide field of view scanning with multiple working distance options available.
- The field of view of multiple cameras can be overlapped to meet wide field of view requirements.
- Applicable to various large-scale inspection scenarios.

Product Specications

Model	VZ-LI-1920-620M23K			VZ-LI-1920-620L3K		
Camera Type	Dynamic Camera					
Working Range	1200~2500mm			2300~3600mm		
Working Distance	1200mm	1700mm	2500mm	2300mm	2800mm	3600mm
Field of View Y（mm）	1811	2567	3737	2049	3071	3848
Z-Axis Accuracy （mm）	0.61	0.90	1.14	1.08	1.54	2.39
Y-Axis Resolution	1920 (2048 optional)					
Maximum Frame Rate	3000 Line/s					

Model	VZ-AR-1920-620M23K			VZ-AR-1920-620L3K		
Camera Type	Static RGBD Camera					
Working Range	1200~2500mm			2300~3600mm		
Working Distance	1200mm	1700mm	2500mm	2300mm	2800mm	3600mm
Field of View X×Y（mm）	1130×1768	1598×2475	2051×3678	1476×2370	1625×2879	1949×3721
Z-Axis Accuracy （mm）	0.49	0.78	1.45	1.12	1.54	2.17
Y-Axis Resolution	1920 (2048 optional)					
Maximum Frame Rate	3000 Line/s					

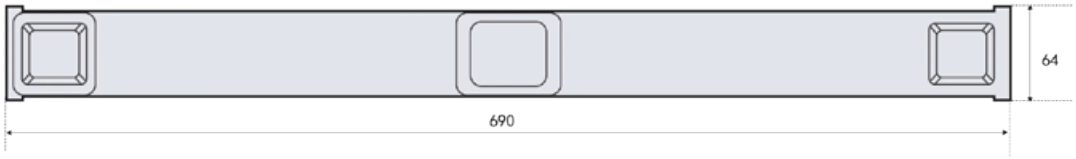
	VZ-LI-1920-620M23K	VZ-LI-1920-620L3K	VZ-AR-1920-620M23K	VZ-AR-1920-620L3K
FOV				

Specifications	Parameters
Baseline Length	620mm
Dimensions	690×90×64mm
Weight	2600g
Resistance to Environmental Light Intensity	480000Lux
Front-end Processing	Output the results directly, without the need for additional hardware platforms for calculation
Intelligent Development Platform	Vizum FH®Platform
Data Interface	Gigabit Ethernet
Communication Method	SDK Function Call (C++), Modbus Tcp
Supported Systems	Windows（7、10、11）、Linux
Light Source	Blue Light (450nm), Red Light (638nm), Infrared (808nm, 850nm, 940nm) Optional
Voltage / Power Consumption	24V/30W
Working Temperature	-20°C ~ 70°C
IP Class	IP65
Factory Intrinsic Parameter Calibration	Yes

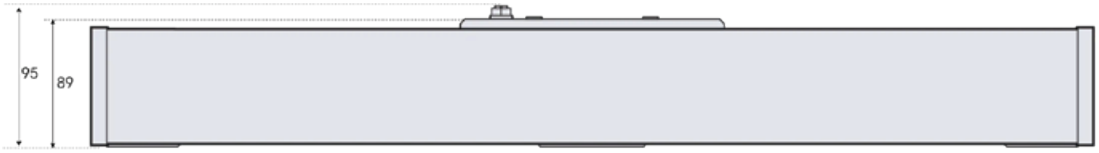
Note: The above data is from Vizumlab, for reference only. The final product shall be subject to the actual delivered goods and the attached inspection report.

Product Size Unit: mm

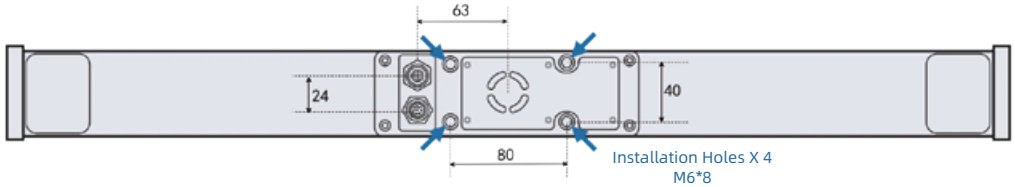
Front view



Bottom View

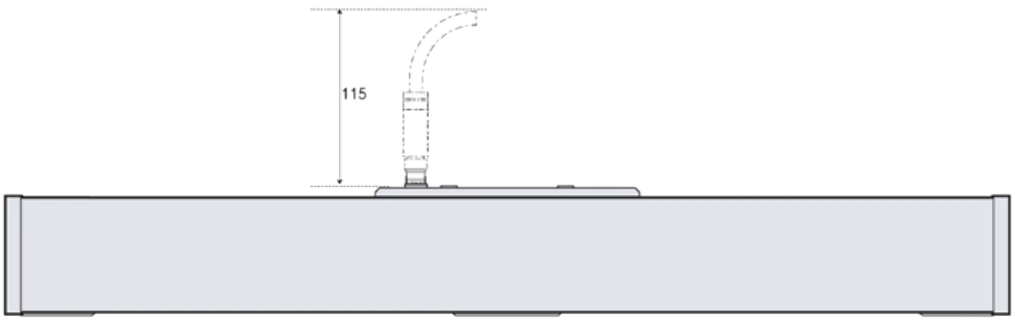


Rear View

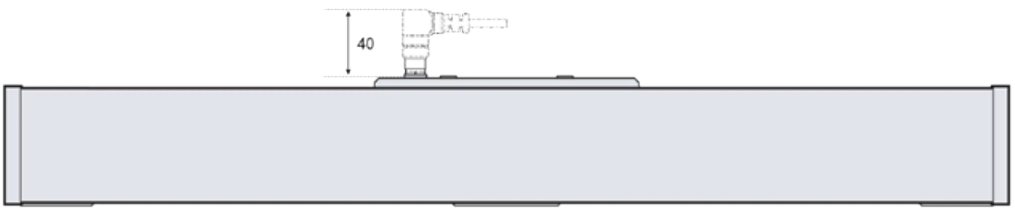


Cable Connection

Straight-through Cable Connection



Elbow Cable Connection

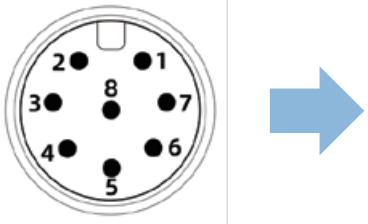


Computer System Requirements

Computer	Requirements
Operating System	Windows11、 Windows10、Windows7（Simplified Chinese, 64-bit Version）
CPU	Based on Intel® Core™ i7 Processor or Higher
Memory	16 GB or Above
Disk Space	500 GB or Above（Need Storage Space for Image Data Additionally）
Graphics Card	Dedicated Graphics Card with 2GB or More of Video Memory
Display Resolution	1920*1080
Network Interface	Gigabit Ethernet Port

Power and Trigger Interfaces

When using external triggering, connect the external signal to the camera's trigger cable according to the actual situation. The detailed explanation and definition of the power and external trigger interface are as follows:



Number	Color-coded Accessory Cables	Indications
1	Red	Positive Terminal of Power Input (VCC)
2	White	Trigger Input Signal_1-GND
3	Green	Trigger Output Signal, Not Currently Supported
4	Yellow	Trigger Input Signal_1
5	Purple	Trigger Input Signal_2(Photocell Input)
6	Blue	Trigger Input Signal_2-GND
7	Brown	Trigger Output Signal-GND
8	Black	Power Ground (GND)