MV-DLS1400M-15

Galvanometer Laser 3D Camera

RoHS CE

Introduction

MV-DLS1400M-15 galvanometer laser 3D camera adopts laser and high-precision galvanometer technology, combined with high-resolution color imaging system and built-in 3D image processing algorithm with high robustness to obtain the RGB-D image with sub-millimeter measurement accuracy.

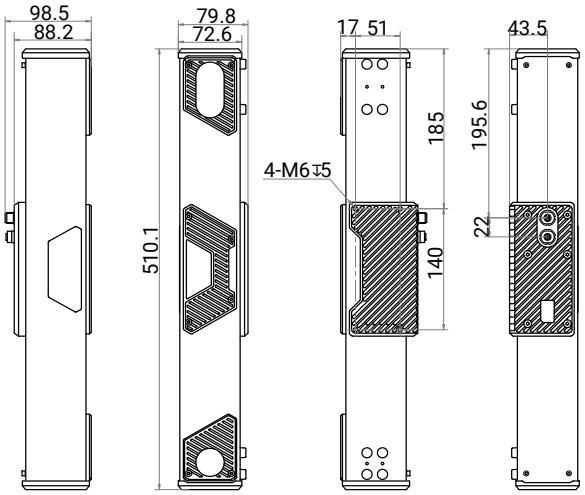
Available Model

MV-DLS1400M-15

Applicable Industry

Workpiece loading and unloading, random bin picking, large parts assembly.

Dimension

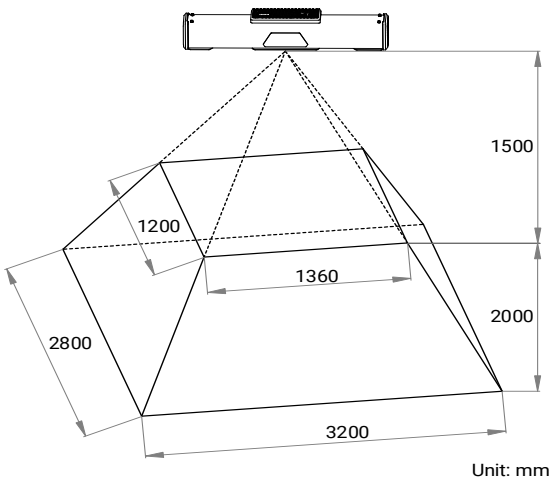


Unit: mm

Key Feature

- Customized optical system provides high-quality image.
- Supports high-uniformity laser module to provide a more detailed point cloud.
- Supports multi-core parallel processing with high precision and high image acquisition rate.
- Supports alignment between depth images and RGB images, convenient for secondary development.
- Adopts high-strength carbon fiber design with high stability.
- Adopts large field of view for the long-distance scenarios.

Measurement Range Diagram



Unit: mm

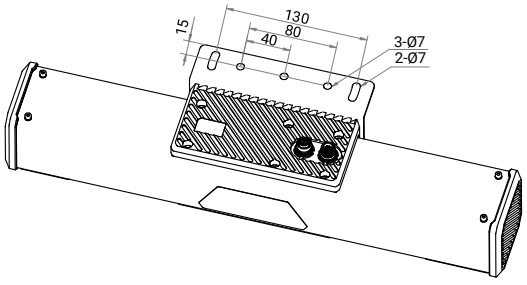
Specification

Model	MV-DLS1400M-15
Performance	
Near field of view	1360 mm × 1200 mm @ 1500 mm
Typical field of view	2200 mm × 2000 mm @ 2500 mm
Far field of view	3200 mm × 2800 mm @ 3500 mm
Clearance distance (CD)	1500 mm
Measurement range (MR)	2000 mm
Repeatability (Z-axis)*1	0.2 mm @ 2500 mm
VDI/VDE accuracy*2	0.3 mm @ 2500 mm
Resolution	RGB: 3968 × 3000 Depth: 1920 × 1536
Data acquisition time	0.4 s to 0.9 s
Image output delay	0.9 s to 1.6 s
Data type	Original image (mono and color images), depth image, RGB-D image
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s)
Digital I/O	12-pin M12 interface provides power and I/O, including opto-isolated input × 3 (Line 0/3/6), opto-isolated output × 3 (Line 1/4/7)
Power supply	24 VDC
Power consumption	Typ. 16 W @ 24 VDC
Mechanical	
Dimension	510.1 mm × 79.8 mm × 98.5 mm (20.1" × 3.1" × 3.9")
Weight	Approx. 1.68 kg (3.7 lb.)
Ingress protection	IP65
Temperature	Working temperature: 0 °C to 45 °C (32 °F to 113 °F) Storage temperature: –30 °C to 80 °C (–22 °F to 176 °F)
Humidity	20% RH to 85% RH (no condensation)
Laser	
Laser safety class	Class 2
Wavelength	638 nm
General	
Client software	RobotPilot, HiViewer
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11
Certification	RoHS, CE

**1: This value is the standard deviation of 100 depth value measurements. The measurement target is a ceramic plate.*

**2: The measurement targets are double ceramic balls with a diameter of 30 mm and a ball spacing of 100 mm.*

Installation Axonometric Drawing



Unit: mm

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