

MV-DB500S-V

RGB-D Smart Camera



Introduction

MV-DB500S-V RGB-D smart camera adopts active binocular 3D imaging technology, and color camera to output high frame rate RGB-D images. It has built-in deep learning algorithm related with volume measurement, and supports direct output of volume data.

Key Features

- High performance sensor and high efficient laser module to output millimeter-scale depth images.
- Built-in deep learning algorithm related with volume measurement and supports direct output of volume data.
- Provides multi-platform SDK for secondary development.
- Supports synchronized output of RGB images and depth images.
- Adopts narrow band filters to have stronger anti-interference ability.
- Provides default internal parameters calibration.
- Ingress Protection (IP) 65.

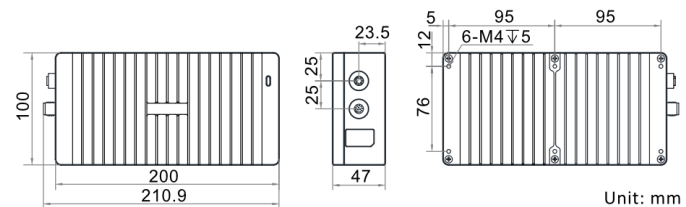
Available Model

MV-DB500S-V

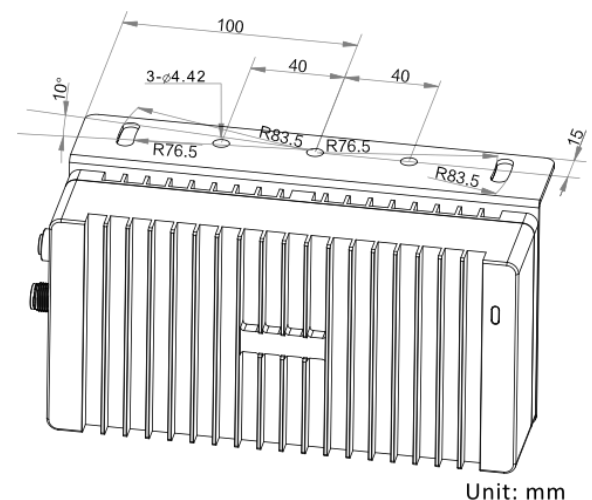
Applicable Industry

Volume measurement, etc.

Dimension



Installation Axonometric Drawing



Model	MV-DB500S-V
Performance	
Near field of view	580 mm × 470 mm
Far field of view	2400 mm × 1800 mm
Clearance distance (CD)	500 mm
Measurement range (MR)	1500 mm
Depth image detection accuracy	X, Y: 5 mm @ 1 m; 10 mm @ 2 m Z: 5 mm @ 1 m; 10 mm @ 2 m
Color image detection accuracy	X, Y: 2.6 mm @ 1 m; 5.5 mm @ 2 m
Scan frame rate	12 fps @ high precision mode
Data type	Original image (mono and color images), depth image, volume information
Laser safety class	Class 1
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s)
Digital I/O	12-pin M12 connector provides power supply and I/O, including opto-isolated input × 3 (Line 0/3/6), opto-isolated output × 3 (Line 1/4/7)
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 9 W @ 24 VDC
Mechanical	
Dimension	200 mm × 47 mm × 100 mm (7.9" × 1.9" × 3.9")
Weight	Approx. 1 kg (2.2 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)
General	
Client software	HiViewer
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11
Certification	CE, RoHS, KC

Measurement Range Diagram

