

Independent
Development

MV-3DL2048G-BB

The MV-3DL2048G-BB 3D laser profiler uses the principle of triangulation and built-in high-precision sub-pixel image processing algorithms to process the continuously acquired profile data in real time to obtain the 3D shape of the target and achieve high-precision measurements and inspections. The 3D laser profiler's full-width scanning rate can reach up to 10kHz, which dramatically improves the inspection/measurement speed and better meets the needs of high-speed production lines. Adopting self-developed special laser, large-diameter Schaum lens, imaging chip with up to 2MP pixels and advanced intelligent imaging algorithms, it can better cope with reflections, multiple reflections and other complex situations, and has stronger anti-interference ability.



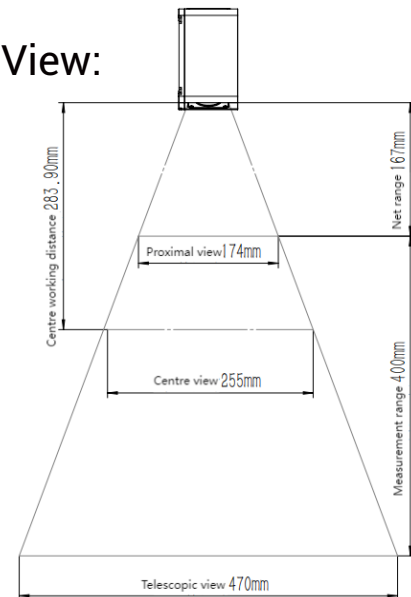
Application Industry:

It is suitable for measured objects with larger sizes, such as railway tracks and auto parts.

Product Features:

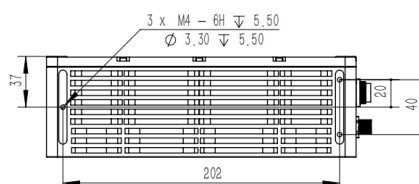
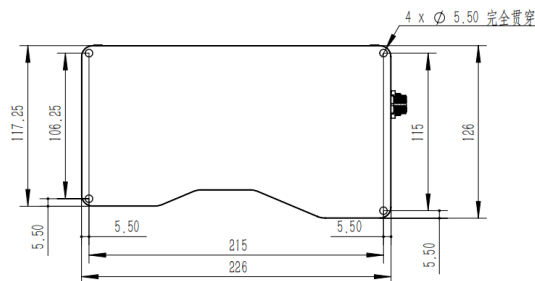
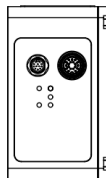
- Ultra-large measuring range, ultra-high scanning rate, ultra-high precision measurement.
- Adopt Sham structure to increase the Z-direction (depth) measurement range and maintain clear imaging over the full range.
- Adopt high frame rate high resolution CMOS, each contour contains up to 2048 measurement points, contour scanning speed up to 10kHz.
- Adopt 450nm blue laser with narrow band filter, HDR function effectively solves the interference caused by different reflectivity and different colours.

Field of View:



Mechanical Specification:

unit:mm



TECHNICAL PARAMETER

Specifications	Model	MV-3DL2048G-BB
Data points/Outlines		2048
Frame		2000fps(full frame), Max frame rate 10K (ROI)
Clearance Distance		167mm
Z-axis measurement range		400mm
Field of view		173.7mm~470mm
Linearity Z(± of MR)		±0.03%
Z-axis reduplication accuracy		3um
X-axis resolution		84.85~241.89um
Z-axis resolution		1.5um
Data interface		Gigabit Ethernet
Input		Single-ended trigger, encoder trigger, laser safety enabled
Laser source		Blue semiconductor laser
Laser wavelength		450nm
Laser grade		Class 3B
Laser power		40mW
Input power supply		+12V~+24V DC±10% ; 1A Max
Power		13W
Case protection class		IP67
Ambient light		Incandescent lamp: less than 10000 lux
Working temperature		-20°C~+45°C
Storage temperature		-30°C~+70°C
Humidity		25-85% (No Condensation)
Vibration		Each direction :1.5mm amplitude,3 hours,10-55Hzfrequency (IEC 60068-2-6)
Impact resistance		Each direction: 15G(IEC 60068-2-27)
Materials		Aluminium alloy
Size		226mm x 126mm x73.5mm(without lens)
Weight		≈ 1.8KG

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