

Machine Vision

3D ToF Mini Camera New

* Suitable for indoor/outdoor applications

DMV-TM

Sharp Eyes that Let Robots See Their Working Space

The 3D ToF Mini Camera DMV-T Mini is designed for AGV / AMR integration. Compact and lightweight, the DMV-T Mini can be integrated in AGVs/AMRs in various sizes. With the ToF technology, the DMV-T Mini is suitable for environments with various lighting conditions and provides quality images and accurate 3D depth information. It also supports a wider field of view, global shutter, and capturing moving images over a large area.

Combined as an integrated solution, the DMV-TM and machine vision platform **DIAVision** help AGVs / AMRs accomplish precise navigation and 24/7 operation.

- Integrate lighting, imaging and processing in a compact design
- 3D ToF depth sensing along with ambient light immunity, and 2D color imaging
- **DIAVision** Machine Vision Platform for value-added vision application software customization



Camera Specifications

Dimensions (mm)	99.5 × 33 × 37.5 (L × W × H)	RGB Shutter	Global Shutter
Working Distance (m)	0.15 ~ 4	Power Supply	PoE: IEEE 802.3bt DC: 24 V ± 10%
FOV	105° × 78°	Protocol	GigE
ToF Resolution	640 × 480 (0.3M)	Power Consumption	Average 8W
RGB Resolution	1440 × 1080 (1.6M)	IP Rating	IP65
Frame Rate (fps)	30	Certification	UL, CE

Applications

AGV / AMR navigation and collision avoidance



3D ToF Smart Camera

New

* Suitable for indoor applications only

DMV-T

Sharp Eyes that Let Robots See Their Working Space

The 3D ToF Smart Camera DMV-T integrates imaging, sensing and computing functions in a compact design. The DMV-T processes the image data in real time with a built-in dual-core CPU and provides quality images and accurate 3D depth information in various lightings.

Combined as an integrated solution, the DMV-T and the machine vision platform **DIAVision** achieve precise measurement, recognition, and positioning for various applications such as object detection and robot vision.

- 60fps frame rate
- 640 × 480 video resolution
- 6 m of working range
- ARM Dual Cortex-A53 & Xilinx FPGA
- Supports GenICam interface and PoE power supply
- IP67 Protection and IEC-certified vibration resistance



Camera Specifications

Sensor	Sony IMX556	OS	Linux
Resolution (Pixel)	640 × 480, 0.3 M	Interface	10/100/1000 Mbps Ethernet, GigE Vision 2.0 Compliant
Frame Rate (fps)	60	Power Supply	PoE: IEEE 802.3bt / 24 V _{DC} ± 10%
LD Wavelength (nm)	850	Dimensions (mm)	72 × 70 × 70 (L × H × W)
FOV	67° × 51°	Weight	500g
Recommend Working Range (m)	6	Certification	IP66, IP67, CE, KC, UL
Distance Resolution (mm)	1	Temperature	Storage: -40°C to 85°C
CPU	Dual Cortex-A53 1.2 GHz	Eye Safety	Class I

Applications

This integrated solution combining the DMV-TM and **DIAVision** is ideal for warehousing and logistics to optimize storage, handling and dispatch of goods, reduce sorting errors, and enhance throughput.



Reduces sorting errors via high-precision object measurement and identification



Enhances pick-and-place and transport efficiency by fast detection and precise positioning



Ensures smooth AGV/AMR operation via obstacle and collision avoidance

Machine Vision

Industrial Camera

DMV-C

High Speed, High Performance and High Stability

- Supports exposure time and white balance settings
- Gamma correction, LUT, Gain
- Software trigger, external I/O trigger and continuous capture
- User-defined ROI and mirror output
- GigE Vision 2.0 compliant
- 64 MB image cache memory
- CE, KC, UL and RoHS certified



DMV-CC/CX

- CMOS sensor
- Resolution: 0.4 M ~ 5 M
- Global shutter

DMV-CL

- CMOS sensor
- Resolution: 0.4 M ~ 20 M
- Global shutter, Rolling shutter

Camera Specifications

Model	Sensor Model	Resolution (W × H)	Optical Size (inch)	Shutter	Exposure Time	Pixel Size (um)	FPS	Mono/Color	Pixel Format	GPIO	
DMV-CC400GM290	IMX287	720 × 540	1/2.9	Global	20μs~1s	6.9	290	Mono	Mono (12,10,8) Bayer (12,10,8)	Isolated Input × 1	
DMV-CC400GC290								Color			
DMV-CC1M6GM075	IMX273	1440 × 1080				75	Mono				
DMV-CC1M6GC075							Color				
DMV-CC3M2GM036	IMX265	2048 × 1536	1/1.8			3.45	36	Mono			
DMV-CC3M2GC036								Color			
DMV-CX5M0GM023	IMX264	2448 × 2048	2/3			23	Mono				
DMV-CX5M0GC023							Color				
DMV-CL5M0GM023	IMX335	2592 × 1944	1/2.8			2	16	Mono	Mono (10,8) Bayer (10,8)		Isolated Output × 2
DMV-CL5M0GC023								Color			
DMV-CL6M3GM016	IMX178	3072 × 2048	1/1.8	Rolling	2.4	8	Mono	Mono (12,10,8) Bayer (12,10,8)			
DMV-CL6M3GC016							Color				
DMV-CL12MGM008	IMX226	4000 × 3000	1/1.7		1.85	5	Mono				
DMV-CL12MGC008							Color				
DMV-CL20MGM005	IMX183	5472 × 3648	1		2.4	5	Mono				
DMV-CL20MGC005							Color				

Applications

Inline inspection, Vision-guided robot applications, Logistics, Food & beverages packaging, Electronics, Printing

Machine Vision System

DMV3000G

Smart Machine Vision System with a User-Friendly Interface

- Supports 2 color/monochrome GigE industrial cameras for simultaneous multi-task detection
- Smart and easy setup allows quick inspection project building
- Enhanced inspection speed to increase production efficiency and save cost
- Multiple built-in image inspection tools, saving program development and editing time
- Ethernet, RS-232, RS-485 interfaces for data output
- Compliant with high industrial standards; higher stability than home edition PC-based systems
- Built-in communication system connected by PLC, no need for extra programming
- Supports lens distortion correction (including camera tilt correction) and grid calibration for greater detection accuracy



Camera Specifications

Resolution	Level	Frame Rate	Pixel Dimensions (Horizontal/Vertical)	Sensor Size (inch) (Horizontal/Vertical)	Pixel Size (μm)	Lens Mount
0.4M	Mono/Color	290	720 × 540	1/2.9	6.9	C-mount
1.6M	Mono/Color	75	1440 × 1080	1/2.9	3.45	C-mount
3.2M	Mono/Color	36	2048 × 1536	1/1.8	3.45	C-mount

Applications

Inspection for mobile phone lens quality, Disposable coffee filters, Logistics, Food & beverages packaging, Electronics, Printing, Motion control, Paper cup inspection, and other automated production



Machine Vision

Machine Vision System DMV1000G

Basic and Easy-to-Use Machine Vision System

- User-friendly interface for quick system setup
- A flowchart project editor saves development time
- Built-in multi-functional developing tools save users from complex programming
- Offers versatile digital I/O terminals
- Compact and light, saves wiring and space
- Exceptional hardware supports high-speed processing
- Supports GigE interface industrial camera
- Complete product line-up including lighting and lenses
- Compatible with Ethernet and RS-232 / 485 communication interfaces for quick system integration
- Supports Micro SD cards
- Compliant with high industrial standards; higher stability than PC-Based systems



Camera Specifications

Resolution	Level	Frame Rate	Pixel Dimensions (Horizontal/Vertical)	Sensor Size (inch) (Horizontal/Vertical) (mm)	Pixel Size (μm)	Lens Mount
0.3M	Mono	120 fps	640 × 480	1/2.9" (4.4 × 3.3)	6.9	C-mount
0.8M	Mono	60 fps	1024 × 768	1/2.9" (3.5 × 2.6)	3.45	C-mount

Applications

Food & beverages packaging, Electronics, Printing machines, Pharmaceuticals,
Vision Guided Robotic System (VGRS), Robot / automated production lines

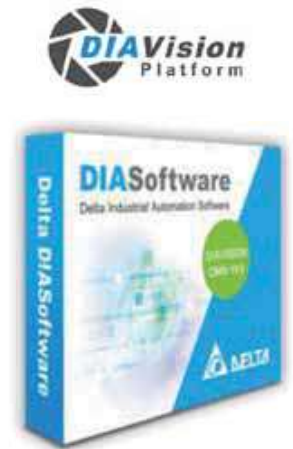


Machine Vision Platform New

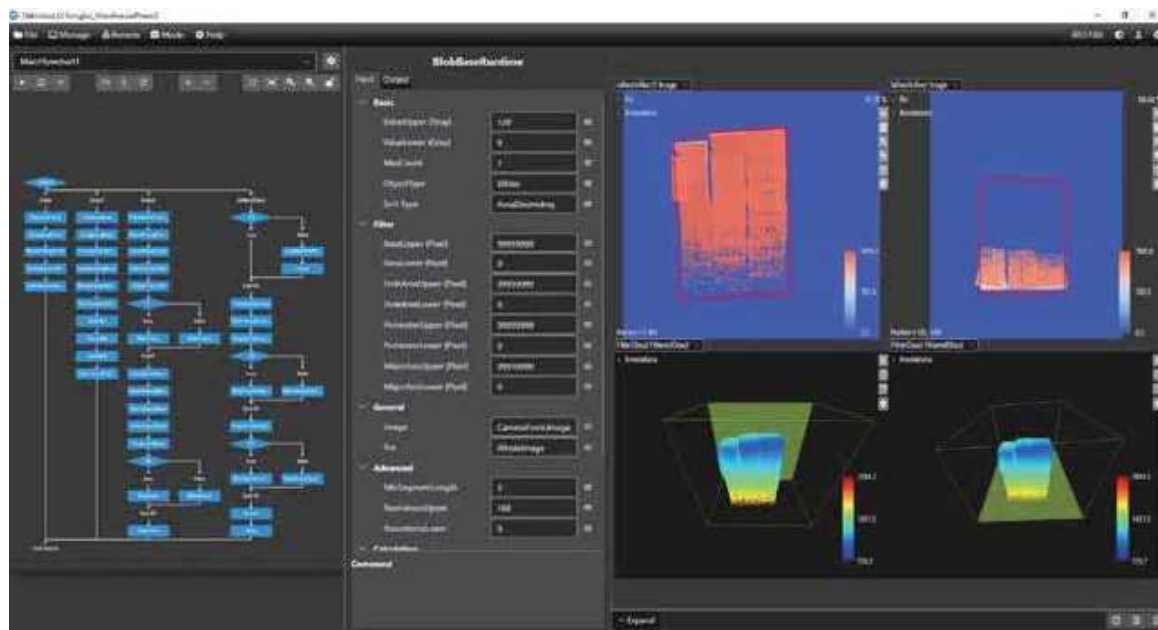
DIAVision

DIAVision enables developers to complete vision application design, development and integration on one single platform. Offering high compatibility with industrial standards and a wide range of built-in Vision Functions, **DIAVision** features high flexibility for value-added vision application software customization.

- Cross-platform - **DIAVision** can operate on Linux and Windows systems
- Web-Based design enables **DIAVision** to run on/with various hardware systems/software
- Compatible with multiple industrial standards and devices, such as GigE industrial cameras, robotic arms, industrial controllers, and more
- Design with abundant graphical components via easy drag-and-drop on the screen
- 100+ built-in Vision Functions, and allows integration of other vision algorithms
- Vision Functions flow and UI designs can be stored and reused for new application development without much effort
- All the assets on **DIAVision** are protected by specific mechanisms to prevent leakage of software design secrets



A Friendly Graphical Editor, WYSIWYG



Design

Configure

Image