

At **OPTONAN**, we are at the forefront of the industrial machine vision revolution. Our company specializes in providing cutting-edge visual inspection solutions that integrate seamlessly into your existing manufacturing and production processes.

INDUSTRIAL MACHINE VISION



With a history rooted in innovation and a future focused on technological advancement, we are dedicated to delivering systems that exceed the highest standards of accuracy and reliability.



PRODUCTS



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We offer variety of machine vision systems designed to integrate seamlessly with your existing production setup.

Our vision inspection systems are designed to enhance quality assurance across different stages of production.

Applications

PRINTING



- Presence/Absence
- OCR (Optical Character Recognition)
- OCV (Optical Character verification)
- Printing Quality Inspection

- Part Orientation
- Part Presence/Absence
- Co-ordinates/Direction
- Dimension Measurement

INSPECTION



DEFECTS



- Surface Defects
- Object Inspection
- Label Inspection
- Object Counting

- 1D-2D Code Reading
- DPM & Pharma Code Reading
- Traceability

CODING



GigE Cameras

High-speed industrial cameras providing crystal-clear images for accurate inspections.

- Supports exposure time and white balance settings
- Software trigger, external I/O trigger and continuous capture
- 64 MB image cache memory
- User-defined ROI and mirror output



GENERAL SPECIFICATIONS

Interface	10/ 100/ 1,000 Mbps Ethernet, compliant with GigE Vision 2.0 standard
Trigger	Software, external input (via the I/O connector)
Power Supply	DC 12~24V or PoE (IEEE 802.3af)
Temperature	Storage: -20~85°C, Operating: 0~45°C
Certification	CE, KC, UL, RoHS, IP30
Compatible OS	Windows 10 x86/ x64, Ubuntu 16.04 or above

PRODUCT SPECIFICATIONS

Shutter Type	Sensor Model	Resolution (W x H)	Pixel Size (um)	FPS	Chroma
Global Shutter	IMX287	720 x 540	6.9	290	Mono/Color
	IMX273	1,440 x 1,080	3.45	75	Mono/Color
	IMX265	2,048 x 1,536		36	Mono/Color
	IMX264	2,448 x 2,048		23	Mono/Color
Rolling Shutter	IMX335	2,592 x 1,944	2		Mono/Color
	IMX178	3,072 x 2,048	2.4	16	Mono/Color
	IMX226	4,000 x 3,000	1.85	8	Mono/Color
	IMX183	5,472 x 3,648	2.4	5	Mono/Color



INDUSTRIAL MACHINE VISION

Smart Cameras

Intelligent cameras that perform complex inspection tasks without the need for separate processing unit.



Our smart cameras are equipped with high-resolution sensors and powerful image processing capabilities, enabling precise inspection, measurement, and identification tasks.

Whether it's quality control in manufacturing, or automation in logistics, our smart cameras deliver exceptional performance and reliability.

Their highly modular hardware platforms, combined with high-performance Machine Vision software, allow for customized adjustments to suit all Machine Vision applications.

Code Readers

Efficient barcode and QR code reading solutions for tracking and validation.



Our code scanners are engineered to read and decode various types of barcodes and QR codes with lightning speed and accuracy.

Ideal for inventory management, point-of-sale systems, and traceability in supply chains, our code scanners ensure smooth and error-free operations.

They are designed to handle even the most challenging conditions, such as low-light environments and damaged codes, making them indispensable tools for any business.



Precision Speed Efficiency

Maximize efficiency, precision, and flexibility with our cutting-edge SCARA and 6-Axis Robotic Solutions. Designed to meet the evolving demands of modern industries, our robots enhance productivity, accuracy, and operational speed across manufacturing, assembly, packaging, material handling, and more.

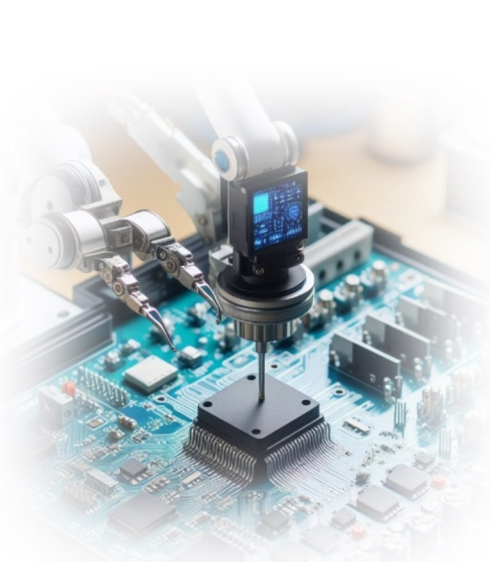


6-Axis Robots

Engineered for maximum flexibility and complex motion, ideal for welding, painting, inspection, and intricate handling, ensuring smooth and efficient operations in dynamic environments.

SCARA Robots

Ideal for high-speed, high-precision applications such as pick-and-place, assembly, and dispensing, offering fast cycle times and compact designs for seamless integration.



With intelligent controls, advanced motion capabilities, and robust construction, our SCARA and 6-Axis Robots empower businesses to reduce costs, improve quality, and maximize throughput. Revolutionize your automation with cutting-edge robotic technology—designed for the future, built for performance.



INDUSTRIAL LENS

High Resolution

Low Distortion

Cost Efficient

Ruggedized

FEATURES

Great cost performance ratio

Industry leading low distortion

6MP with 1/1.7" or 1/1.8" sensors

Compact and uniform lens design

Same Filter Size and Diameter

High quality performance at close up distances

PRODUCT SPECIFICATIONS

Focal Length	Sensor Size	Aperture Range	Iris Type	Operating Temp
6mm	1/1.7" - 1/1.8"	F2.4-16	Manual with Lock	-20°C ~ +60°C
8mm	1/1.7" - 2/3"	F2.4-16		
12mm	1/1.7" - 2/3"	F2.4-16		
16mm	1/1.7" - 2/3"	F2.4-16		
25mm	1/1.7" - 2/3"	F2.4-16		
35mm	1/1.7" - 2/3"	F2.4-16		
50mm	1/1.7" - 2/3"	F2.8-16		



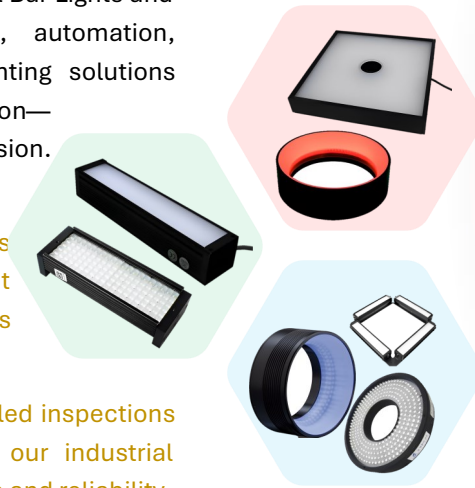
LIGHTING MODULE

Illuminate Precision with Industrial Lights




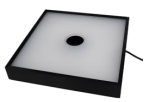
Enhance visibility, accuracy, and efficiency in your industrial applications with our high-performance Industrial Bar Lights and Ring Lights. Designed for machine vision, automation, inspection, and assembly processes, our lighting solutions ensure consistent, bright, and uniform illumination—eliminating shadows and glare for optimal precision.

Built for harsh industrial environments, our lights feature durable construction, energy-efficient LEDs, and customizable designs to fit various applications.

Whether you need focused illumination for detailed inspections or wide-area lighting for automated systems, our industrial lighting solutions deliver unmatched performance and reliability.



PRODUCT SPECIFICATIONS

Type	Model	Size (mm)	Rows	Voltage	Diffusion	Color	
Bar Light	OVB-13-4-24-W	135 (L)	4	24V	Normal / Diffused	(R-B-W) (IR 850)	
	OVB-18-4-24-W	180 (L)	4	24V			
	OVB-22-4-24-W	225 (L)	4	24V			
	OVB-31-4-24-W	315 (L)	4	24V			
Ring Light	OVR-90-60-24-W	90 (Dia.)	1	24V	Normal / Diffused	(R-W) (IR 850) (UV 375)	
	OVR-12-90-24-W	120 (Dia.)	2	24V			
	OVR-15-60-24-W	150 (Dia.)	2	24V			
Shadow-less	OVR-116-24-W	116 (Dia.)	1	24V	Diffused	(R-W)	
Hi-Power Bar	OVBH-15-1-24-W	150 (L)	1-2	24V	Diffused		
Hi-Power Ring	OVRH-10-90-24-W	100 (Dia.)	1	24V	Diffused		
Back Light	OV-FL-100-24-W	100 x 100	-	24V	Diffused	(R-W)	
	OV-FL-150-24-W	150 x 150	-	24V			

* More customized lights are also available. Contact for customization and more sizes.

Experience the power of superior illumination. Boost accuracy, reduce errors, and improve productivity with our Industrial Bar Lights and Ring Lights—engineered to keep your operations running smoothly.



Our IPCs ensure robust performance and long-term support for smooth operations.

Available in rack-mounted, panel-mounted, and embedded systems, Our Industrial PCs, integrate seamlessly into any industrial setup. With **high-performance processors**, **ample storage**, and **versatile connectivity**, they handle complex tasks effortlessly. Whether controlling machinery, monitoring processes, or analyzing data,



PRODUCT SPECIFICATIONS

CPU	Intel® i5/i7/i9,12th/13th/14th Gen Core™ i CPU
Communication Ports	2 x Giga LAN, 2 x USB 3.2 (Gen2) and 6 x USB 3.2 (Gen1); 2 x RS-232/422/485 and 4 x RS232 serial ports (Optional)
Memory	1 x 2.5" HDD/SSD, 1 x mSATA, and 1 x NVMe, Supports upto 32GB RAM, 2TB
Temperature	-20 ~ 60 °C
Power Supply	220VAC / 24VDC
Temperature	-20 ~ 60 °C
OS	Supports Windows 10 / 11

ACCESSORIES

- HMI's & Touch Panel PC
- NVME's & SSD up to 4TB
- Hi-Speed PCIe & USB Cards
- Industrial Gigabit Switches
- Acquisition Cards



PANEL COMPONENTS

Components

- ⇒ PLC
- ⇒ Servo Set
- ⇒ Sensor & Switches
- ⇒ VFD
- ⇒ Cables



Panel

Our expertise in panel building ensures that we deliver high-quality, reliable, and customized solutions tailored to meet the unique needs of our clients. Whether it's for industrial automation, power distribution, or process control, our panels are designed to enhance efficiency, safety, and reliability in any electrical system.



Empowering Innovation. Enhancing Efficiency.

At **OPTONAN**, we are committed to delivering cutting-edge machine vision and automation solutions that drive precision, productivity, and profitability. Whether you need advanced inspection systems, intelligent robotics, or seamless automation, our expertise ensures unmatched performance and reliability for your operations.

Partner with us to transform your industrial processes with smarter, faster, and more efficient technology. Let's build the future of automation—together.



Get In Touch

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