

WE HELP YOU

See More with Vision. Do More with Automation.

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#SmartAutomation

We bring together Automation, Systems, Electronics, Instrumentation, and Robotics (ASEIRO)

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COMPANY OVERVIEW & VISION



See More with Vision. Do More with Automation.

At Aseiro we see a world where every factory can run on its own. Aseiro Industries Pvt Ltd was founded to help manufacturers adopt Industry 4.0 standards by integrating robotics, machine vision, and advanced automation into production lines.

Built on the legacy of **Vinayak Automation**—a trusted industry name since **2007**. Backed by over 1**5 years of hands-on expertise**, Aseiro delivers custom robotics and machine vision solutions designed for today's fast-moving factories. We help industries eliminate human error, and boost productivity, and quality through smart, custom-built automation.

Born from experience. Built for the future.





 Dimensional Measurement Systems



Industrial Robots for Shopfloor



 Defect Detection using Machine Vision



> Warehouse Automation



Custom Solutions

INDUSTRIES WE SERVE

Complete Support



> Autonomous Mobile Robots (AMRs)

Smart Integration Trusted Experience





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Automotive

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Pharma & Healthcare



Textiles







Machine Vision Products

Our machine vision products deliver comprehensive, high-performance imaging solutions for industrial applications. We offer a range of cameras—including **area scan**, **line scan**, **and smart camera**. They capture high-resolution images for precise inspection, measurement, and real-time analysis.

Our smart code readers and 3D cameras enhance automated data collection, depth sensing, and quality control, while our lens systems and accessories ensure optimal imaging in even the most challenging environments.



Area scan cameras

Area scan cameras capture full 2D images in a single shot, making them ideal for inspecting still or slow-moving objects. They're easy to integrate and well-suited for general machine vision and measurement tasks.

CS AREA SCAN CAMERA

High-performance camera designed for industrial vision applications

- High-res, rugged area scan camera with built-in processing.
- Ideal for inspection in auto, pharma, food, and electronics.
- Low power, easy to integrate, built for tough environments.
- Reliable, affordable, SME-ready.

CH AREA SCAN CAMERA

Ultra-high resolution for precision imaging

- Up to 151 MP resolution
- Interfaces: GigE, USB 3.0, 10GigE, CoaXPress
- Global shutter CMOS for sharp, fast capture
- Supports LUT, Gamma, gain/exposure control



CE AREA SCAN CAMERA

Compact and cost-effective for standard applications

- Resolution range: 0.3 MP to 20 MP
- Rolling shutter for static/mildly dynamic scenes
- USB 3.0 / GigE interface support
- Compact design with C-mount lens support

CA AREA SCAN CAMERA

High-speed imaging for dynamic industrial applications

- High-speed imaging with global shutter Sony sensorsUltra-fast frame rates up to 814 fps for dynamic
- applications
- Supports ultra-short exposure times (as low as lµs)
 Available in GigE and USB 3.0 interfaces for easy integration
- NIR imaging support (750–1100 nm) for specialized inspections



CB BOARD LEVEL CAMERA

Compact and versatile for embedded vision

- Ultra-compact, board-level design
- Supports USB3/GigE interface
- Multiple lens mount options (C, M12, bare)
- Manual/auto control for exposure, gain, white balance



CI AREA SCAN CAMERA

Thermal vision for industrial precision

- Captures thermal images using infrared sensor
- Measures temperature accurately in real time
- Ideal for equipment monitoring and heat analysis

CI SERIES INFRARED CAMERA

Thermal imaging for industrial monitoring

- Uncooled Vanadium Oxide detector
 - 8–14 µm infrared response range
- Captures accurate temperature data
- Ideal for heat-based fault detection
- Explore more on our website: () www.aseiro.in 🔀 subbarao@aseiro.in ()+91 70135 38726



Line scan cameras



A line scan camera captures images one row at a time, ideal for fast-moving or continuous materials like webs and fabrics, ensuring high-resolution, detailed inspection.



CL LINE SCAN CAMERA

High-speed imaging for continuous inspection

- Resolutions from 2K to 16K
- Interfaces: GigE, Camera Link, CoaXPress
- Supports flat field correction, LUT, gamma
- Compact design for easy industrial integration

Key Features:

Applications:

enclosure.

performance.



Smart Cameras

A smart camera captures and processes images in real-time with a built-in processor, eliminating the need for external computing. Its compact design simplifies automated inspection and quality control.

SC1000 Series Vision Sensor

Key Features:

- Combines advanced vision detection capabilities with the simplicity of a sensor.
- Embeds high-precision vision algorithms & Al modules.
- Ultra-compact design for easy integration.
- Applications;
- Presence/absence detection and classification tasks
- Integration into various machines and compact workstations

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SC2000a Series Smart Camera

Key Features:

- Specifically designed for Automated Guided Vehicles (AGVs).
- Robust hardware paired with high-performance algorithms.
- Non-contact design ensures stable, efficient, and accurate positioning.

Applications:

- AGV navigation
- Unmanned warehousing systems
- Industries such as lithium battery manufacturing and photovoltaics

SC

SC3000 Series Smart Camera

SC2000e Series Smart Camera

Designed for error-proofing

• Presence/absence (Y/N) checks

Part number (P/N) verification

Combines lighting, image capture, processing,

and communication in a single compact

Industrial error-proofing and quality control tasks

reliable

with

Key Features:

- Integrates imaging, processing, and communication into a compact design.
- Equipped with advanced vision tools and the new SCMVS for quick on-site deployment and reduced debugging.

Applications:

- Visual Inspection
- Cost-effective machine vision solutions in industrial settings



SC6000 Series Smart Camera

Key Features:

- Built on a high-performance embedded platform with robust AI capabilities.
- Integrated with VM algorithm software offering access to over 140 algorithms.
 - Delivers powerful processing combined with high usability and flexibility.
- Applications:
- Single-camera vision systems
- Positioning, measurement, identification, and inspection across various industries

3D CAMERAS





A 3D camera captures both color and depth to create accurate 3D images. It enables precise measurement and real-time analysis, ideal for robotics, inspection, and 3D mapping.

Line Laser 3D Camera

Key Features:

- Uses high-precision measurement.
- Employs advanced dynamic image processing algorithms.
- Accurately captures object dimensions.
- Offers a wide dynamic detection range and robust performance under varying conditions.
- Applications:
- Logistics and warehousing inspections
- Industrial dimension measurement tasks

RGB-D smart camera

Key Features:

- Utilizes active binocular stereo imaging combined with color cameras.Captures highframe-rate RGB-D images.
- Integrates built-in algorithms and deep learning for independent vision tasks.

Applications:

- Standalone systems
- Robotic parcel-feeding
- Palletizing and depalletizing operations



Smart Code Readers

A Smart Code Reader combines a high-resolution imaging sensor with built-in decoding algorithms to rapidly and accurately read barcodes and 2D codes. Its compact, all-in-one design simplifies integration, making it ideal for traceability, logistics, and automated data collection across diverse industrial environments.

ID2000 Series Smart Code Reader

Key Features:

- Designed for close-range barcode reading.
- Supports common 1D, 2D, and DPM codes.
- **Applications:**
- Integration into automated machinery and assembly lines
- Environments where high-quality, close-range code reading is needed

ID5000 Series Smart Code Reader

Key Features:

- Powered by a multi-core deep-learning processor for advanced decoding.
- Equipped with a mechanical focus lens and additional components.
- Supports resolutions up to 20 megapixels for superior image quality.

Applications:

 Diverse code reading scenarios requiring highresolution imaging and performance

ID6000 Series Smart Code Reader

Key Features:

- Specially designed for logistics applications.
- Utilizes advanced algorithms to handle diverse and complex code reading scenarios.

Applications:

 Logistics, warehousing, and supply chain management where detailed code reading is critical

ID300

ID3000 Series Smart Code Reader

Key Features:

- Embedded deep-learning platform enhances decoding accuracy.
- Compact, modular design simplifies system setup.
- Features mechanical focusing, automatic polarization, and controllable lighting.
- Applications: A wide range of code reading tasks across diverse industrial applications

IDH Series Logistics Code Reader

Key Features:

- Features a high-resolution global-shutter sensor for crisp image capture.
- Robust protection for durability in challenging environments.
- Red/white fill lights that adjust automatically for optimal illumination.
- Supports both USB and network interfaces for flexible connectivity.

Applications: Handheld scanning tasks in inventory management, retail, and industrial settings

ID7000 Series Smart Code Reader

Key Features:

- Designed specifically for bottom-surface scanning in logistics environments.
- Features 48 LED illuminators and an integrated structure for ultra-wide coverage.

Applications:

Complex scanning requirements in logistics, such as pallet or container scanning.

IDS Series Logistics Code Reader

Key Features:

- Unifies image capture, data processing, and output in a single compact design.
- Emphasizes user-friendly operation and reliable performance with extensive features.
- **Applications:**
- Various code reading applications in logistics and industrial automation

Lens

Key Features:

- Self-developed design for vision applications.
- Offers high performance at a low cost.
- Delivers high-definition images with consistent clarity across the frame.
- Provides superior relative illumination.

Applications:

 Precision imaging needs in industrial vision systems

M12 Lens

Key Features:

- Specifically designed for embedded vision applications.
- Features an all-metal barrel and all-glass optics for excellent imaging performance.

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- Robust design improves stability in demanding conditions.

 Applications:
- Industrial environments where stability and durability are critical.
- Embedded machine vision systems

Lens Accessorie

Key Features:

- Includes adapter rings and filters.
- Expands the capabilities of cameras and lenses in complex imaging setups.
- Enables easy conversion between different lens mounts.
- Enhances image quality to meet various technical requirements.

Applications:

- Custom imaging setups requiring flexible mounting solutions.
- Enhancement of camera systems for specialized applications.

Lights

Light Sources

Key Features:

- Specifically designed for embedded vision applications.
- Features an all-metal barrel and all-glass optics for excellent imaging performance.
- Robust design improves stability in demanding conditions.

Applications:

- Industrial environments where stability and durability are critical.
- Embedded machine vision systems

Light controller

Key Features:

- Modern Design: Sleek, user-friendly design that fits seamlessly into any vision system.
- Precise Control: Offers fine control over voltage or current to ensure consistent, accurate lighting.
- High Compatibility: Works with a wide range of light source products, including dome, ring, and square lights.
- Stable Performance: Delivers reliable power output for uninterrupted operation.
- Easy Integration: Simple to set up and integrate with various machine vision systems.
- Flexible Settings: Adjustable parameters to suit different industrial lighting needs.

Applications:

- Industrial Machine Vision: Ensures uniform lighting for quality inspection and image capture.
- Automated Inspection Lines: Provides precise and stable light for high-speed, accurate product testing.
- Quality Control: Used in sectors like automotive, electronics, and packaging where consistent lighting is critical.
- Custom Automation Setups: Ideal for environments that require tailored light control for specific applications.
- Research & Development: Supports experimental setups needing reliable, fine-tuned illumination.





Model	Processor & Performance	Interfaces & Connectivity	Key Features	Typical Applications
VC2000 Series	Intel high-performance processing chip	Gigabit network port, IO, light source, serial port, etc.	Compact design; complete solution for simple visual applications with multiple cameras.	Basic visual inspection, simple setups
VC3000 Series	Flagship computing power with advanced IPC technology	Comprehensive control and data interfaces for various vision tasks	High compatibility with common machine vision components; ideal for positioning, inspection, measurement, & recognition.	High-speed inspection, positioning, measurement tasks
VC5000 Series	Intel 12th Gen high- performance processor	Rich visual interfaces; multiple PCIe extensions (acquisition/graphics cards)	Supports AI, modular design; efficient, stable control and data transmission	Multi-station detection, Al applications, advanced visual processing
VT2000 Series	Intel high-performance processing chip	Built-in rich data acquisition and control interfaces with integrated touch screen	All-in-one integrated chassis with capacitive touch screen for flexible multi-camera visual applications	Simple, interactive visual inspection setups



> Autonomous Mobile Robots (AMRs)

Flexible robots for intelligent intralogistics designed to automate internal logistics in warehouses and manufacturing. They offer high-precision navigation, flexible deployment, and efficient material handling across diverse industries.



Key Features:

- Efficient Towing: Capable of pulling one or multiple racks simultaneously, optimizing material handling processes.
- Flexible Navigation: Supports forward motion and curved turns, adapting to various warehouse layouts.
- Advanced Navigation: Utilizes Laser SLAM navigation with QR code assistance for precise positioning. **Applications**:
- Automated material transport in warehouses and manufacturing facilities.
- Integration into existing racking systems for streamlined operations.

Forklift Mobile Robots (FMR)

Key Features:

- Heavy-Duty Lifting: Equipped to handle substantial payloads, suitable for various industrial applications.
- Comprehensive Movement: Supports forward, backward, sidesway, skew, curve, and rotation movements for versatile operation.
- Safety Measures: Incorporates 360° protection, including laser sensors, bumpers, and emergency stop buttons to ensure safe operation.

Applications:

- Transporting heavy materials in automotive manufacturing and other heavy industries.
- Enhancing efficiency in warehouses requiring robust lifting solutions.

Conveyor Mobile Robots (CMR)

Key Features:

Versatile Docking: Compatible with various conveyors, including rollers, belts, and chains, facilitating efficient material transfer.

SEIRO

- Machine Integration: Capable of docking with machines for direct material handling, enhancing production workflows.
- Adaptable Design: Supports diverse carriers such as cartons, trays, and pallets to accommodate different material types.

Applications:

- Automated material transfer in manufacturing processes.
- Integration into conveyor systems for continuous production lines.



Conveyor Towing Unit (CTU)

Key Features:

Flexible Towing: Easily attaches to and tows conveyors, allowing dynamic changes in production layouts. ٠ Enhanced Mobility: Improves the adaptability of conveyor systems within manufacturing environments. •

Applications:

- Adjusting production lines in response to changing manufacturing needs.
- · Enhancing the flexibility of material handling systems in dynamic production settings.