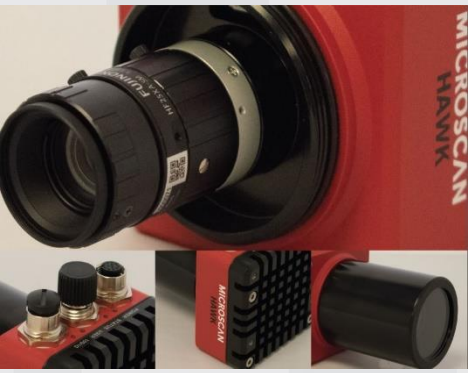
HAWK MV-4000 Smart Camera

The HAWK MV-4000® is Microscan's new high-performance camera. It is the middle tier in a suite of products that includes miniature MicroHAWK MV Smart Cameras at the lower end and Visionscape PC-Based, extremely powerful GigE Camera systems at the higher end. This smart camera has 4 times the processing power, and up to 6 times the frame rates over the previous generation of smart cameras. With near PC performance, there are virtually no applications beyond the reach of the HAWK MV-4000.



HAWK MV-4000 at a Glance:

- High-performance C-mount machine vision camera with near-PC speeds
- Very high-quality images at rates up to 295 FPS
- Capable of storing and running many large and complex jobs
- Rugged IP67-rated design for use in industrial environments
- Customizable, selectable fully integrated hardware options for a wide range of applications
- Mono and color sensor options available
- Scalable software options

High Performance and Speed

The HAWK MV-4000 can store, load, and run up to 50 simple or complex jobs. Processing times reach near-PC speeds, enabling the camera to keep up with line rates of up to 6,000 parts per minute and speeds of over 300 inches per second. The camera features a full range of sensors, from 0.3 MP to 5PM based on the ON Semiconductor PYTHON CMOS series. All sensors have a 4.8 µm pixel size enabling them to capture high-quality images at very high frame times.

Full Control and Interoperability

The camera is equipped with real-time Digital I/O, RS-232, and GigE Ethernet ports. Through these communication channels, the user can control and trigger the unit, as well as receive results and images. The GigE port allows images to be ported to a display at nearly the same speed as the frame rate. Additional protocols such as PROFINET and Ethernet/IP allow seamless integration with most of the key PLC platform devices on the market.

Intuitive Set-Up

Intuitive user interfaces offer the fastest setup time out of the box. User-friendly software features include simple setup environment for device connectivity, image tuning and inspection tasks, as well as browser- based online monitoring.

Ease of Customization and Scalability

Access the full range of Microscan automation tools, from selectable hardware (sensor, optics, lighting) and software options. Expand HAWK's applications from basic to more complex machine vision inspection by scaling to advanced software all on the same device.

Integrated Lighting

The camera is fully accessorized for use with NERLITE Smart Series machine vision lighting products.

Applications

The combination of C-Mount lens, external lighting, and 0.3 to 5 MP sensors allows users to configure the system to accomplish virtually any application, from reading tiny 1D or 2 D symbols on flat panel displays to inspecting entire automotive assemblies including:

- Fast-moving consumer goods inspection
- Automotive assembly inspection and verification
- High-precision gauging and guidance
- Electronics assembly verification and identification
- Semiconductor packaging and component inspection
- 1D, 2D, and OCR symbol reading for any size mark
- Fast inline 1D and 2D symbol verification and validation
- Color inspection and verification.

Software Options:

Machine Vision Software

AutoVISION® Machine Vision Software *provides a simple setup & runtime interface for solving basic to mid-range vision that can be mastered by a casual user on the factory floor. Scalable to Visionscape®.*

Advanced Machine Vision

Visionscape® Machine Vision Software *provides a professional setup & runtime interface with access to Microscan's full auto ID, verification, and machine vision tools.*
HAWK MV-4000 can be controlled and monitored through custom web interfaces or UIs specifically designed and programmed for the application.

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