

Visionscape® Express

Compact, Stand-alone Machine Vision System for Industrial Applications

Product Summary

Visionscape Express is a complete, stand-alone machine vision system that provides low-cost vision solutions for a broad range of applications. This flexible full-featured product offers more than 50 robust vision tools and a variety of hardware and software options.

Like all other members of the Visionscape product line, the Express is scalable, allowing users to leverage their application development investment when moving from one configuration to another throughout the Visionscape series. The compact size, flexibility, and affordability of Visionscape Express make it an ideal choice for many machine vision applications.



Features and Benefits

- Supports up to four cameras. Configurable with:
 - Standard analog camera interface
 - Digital camera interface
 - Enhanced analog camera interface
- Over 50 built-in robust vision tools for industrial applications such as:
 - Inspection
 - Gauging
 - Alignment/guidance
 - Data Matrix reading
 - Optical character recognition
 - Optical character verification
- Visionscape software for fast vision application development and deployment
- No programming required
- Scalable software fully compatible with Visionscape product line
- On-board digital I/O for triggering, strobe control and other interfacing
- Two serial ports and one parallel port
- Built-in Ethernet networking
- High-performance vision acceleration ASIC available in some configurations

Applications

- Inspection
- Assembly verification
- Gauging
- Part location
- Alignment/robot guidance
- Automatic identification
 - Data Matrix reading
 - Bar code reading
 - Optical character recognition
 - Optical character verification

Flexible Camera Interface

Visionscape Express can be configured with any of RVSI's vision accelerators:

- 1304 vision accelerator with analog interface supporting standard RS-170/CCIR cameras
- 1404 vision accelerator with digital camera interface supporting LVDS or RS-422 high-resolution digital cameras
- 1744 vision accelerator with enhanced analog interface supporting a variety of high- or standard-resolution, progressive or partial scan, asynchronous reset, or shuttered cameras on a single card

Extensive On-Board I/O

All configurations feature extensive I/O capabilities including dedicated triggers and strobe outputs for all available channels.

Each system is configured with 10 opto-isolated digital I/O points which are wired directly to terminals on the back of the Visionscape Express system. For expanded capabilities, an optional external opto-isolated I/O board provides 24 digital I/O points and 8 analog outputs.

Vision Acceleration ASIC

Visionscape Express 1304, 1404, and 1744 models feature a custom vision ASIC designed to accelerate low-level vision algorithms for enhanced throughput and robustness.

Visionscape Software

Visionscape software encompasses proven solutions for many applications and vertical markets as well as intuitive point-and-click graphical environments for general vision application development and deployment.

Physical Characteristics

Dimensions:	7.9" H x 3.5" W x 9.7" D (200 mm H x 90 mm W x 248 mm D)
Power Requirements:	85 - 265 VAC, 47 - 63 Hz
Weight:	8.0 lbs (3.64 kg)

System Components

Standard:	Visionscape Express system Visionscape AppFactory™ software 10 points of built-in opto-isolated digital I/O
Optional:	Wide variety of machine vision imagers with integrated cameras and RVSI lighting Light sources, cameras and lenses 24 points external opto-isolated digital I/O

User Environment

Operating Temperature:	50° F to 122° F (10° C to 50° C)
Humidity:	5% to 95%, non-condensing

Regulatory

Electrical Safety:	CE compliant
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