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## NI EVS-1463RT

### Real-Time Vision System for GigE Vision, Camera Link Devices

- Real-time machine vision system
- High-performance, multicore processor; 2 GB RAM for fast inspections and large images
- Connectivity to multiple cameras for simultaneous inspections (GigE Vision and base Camera Link)
- Configure with Vision Builder for Automated Inspection or program with the Vision Development Module
- Reliable, rugged, industrial system with no moving parts (fanless and solid-state hard drive)
- High I/O count for synchronization and industrial communication



## Overview

The NI Embedded Vision System is a rugged controller that combines industrial camera connectivity and open communication with the high performance and flexibility of a multicore processor.

The NI EVS-1463RT is designed to process images in real time from base-configuration Camera Link and multiple GigE Vision cameras, and is suitable for machine vision applications such as high-speed sorting, assembly verification, packaging inspection, and web inspection using line-scan cameras. With a high isolated and TTL I/O count, fast multicore processor performance, 2 GB RAM, and real-time OS, the EVS-1463RT can synchronize with programmable logic controllers (PLCs), human machine interfaces (HMIs), and motion controllers for more complex, higher-speed inspections.

This vision system contains no moving parts because it is cooled by convection (fanless) and includes a solid-state drive (SSD), making it ready for the demanding conditions of manufacturing.

Like all NI vision hardware, you can configure the EVS-1463RT with the NI Vision Builder for Automated Inspection (AI) featuring an easy-to-use, menu-driven environment or with the LabVIEW Real-Time Vision Development Bundle featuring the LabVIEW graphical programming environment for applications that require a programmatic solution.

## Specifications

### Specifications Documents

### Specifications Summary

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#### General

Product Name	EVS-1463RT
Product Family	Vision Systems

<b>Form Factor</b>	Embedded Vision
<b>Operating System/Target</b>	Real-Time
<b>Included Vision Software</b>	Vision Acquisition Software , Vision Builder AI Runtime , Vision Development Module Runtime
<b>Product Certifications</b>	C-Tick , CE , FCC Part 15 , ICES , IEC , RoHS , UL - Product Safety , WEEE
<b>Industrial protocol support</b>	Modbus/TCP , RS-232 , TCP/IP , EtherCAT , Ethernet/IP , Modbus
<b>FPGA Target</b>	No
<b>Vision System</b>	
<b>Processor</b>	Intel Core Duo 1.66 GHz
<b>System Memory RAM</b>	2 GB
<b>Nonvolatile Storage Memory</b>	1 GB
<b>Number of Ethernet Ports</b>	2
<b>Ethernet Speed</b>	1000baset , 100baset , 10baset
<b>Camera Interface</b>	Camera Link , GigE Vision
<b>Number of Camera Link Ports</b>	1
<b>Camera Link Configuration</b>	Base
<b>Video Out</b>	DVI
<b>Serial Port</b>	Yes
<b>System Form Factor</b>	Embedded Vision System
<b>Storage Type</b>	FireWire external drives (not included) , Removable CompactFlash (not included) , Solid-State Drive , USB mass storage devices (not included)
<b>Camera Connectivity</b>	
<b>Number of GigE Vision Ports</b>	2
<b>Number of USB Ports</b>	4
<b>Digital I/O</b>	
<b>Number of Isolated Input Channels</b>	2
<b>Number of Bidirectional TTL Channels</b>	4
<b>Timing</b>	
<b>Number of Trigger Inputs</b>	4
<b>Physical Specifications</b>	
<b>Length</b>	110 mm

<b>Width</b>	200 mm
<b>Height</b>	220 mm
<b>Minimum Operating Temperature</b>	0 °C
<b>Maximum Operating Temperature</b>	45 °C

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