

# In-Sight® Explorer 5.7.0 Release Notes

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## Overview

This document describes the In-Sight Explorer software, including the following topics:

- [System Requirements](#)
- [New Features](#)
- [Changes & Fixes](#)
- [Known Issues](#)

**Note:** Visit the [In-Sight Online Support Center](#) to download the latest release notes and documentation, including localized editions. To access the updated documentation from the In-Sight Explorer user interface and Microsoft® Windows® Start menu, complete the following steps:

1. Log on to the PC with administrative privileges.
2. Copy the downloaded documentation to the appropriate location in the installation directory. The default location is: C:\Program Files (x86)\Cognex\In-Sight\In-Sight Explorer 5.x.x\Documentation.

## System Requirements

This section describes system requirements for the In-Sight Explorer software.

### PC Hardware Minimum Requirements

The following minimum hardware requirements are for PCs that you connect to a single low-resolution In-Sight vision system running at a slow production speed:

- Intel® Celeron® 1000M processor running at 1.8GHz (or equivalent)
- 2GB of available RAM
- 4GB of available hard-disk space
- Video card that can display 1024 x 768 resolution at 24-bit color depth (the DPI Display setting must be set to 96 DPI)
- Network interface card (at least 100Mbps) for connecting to an In-Sight vision system

### PC Hardware Recommended Requirements

The following recommended hardware requirements are for PCs that you simultaneously connect to up to four In-Sight vision systems:

- Intel Core™ i7 processor running at 2.7GHz (or equivalent)
- 4GB of available RAM
- 8GB of available hard-disk space

- Video card that can display 1920 x 1080 resolution at 32-bit color depth (the DPI Display setting must be set to 96 DPI)
- Gigabit network interface card for connecting to In-Sight vision systems

## Operating System Requirements

In-Sight software has been tested on the following operating systems:

- Microsoft Windows 10 Professional (64-bit)
- Microsoft Windows 7 Professional, Service Pack 1 (64-bit)
- Microsoft Windows Server 2016

Although you can install and run In-Sight Explorer on other Windows operating systems, PCs that do not meet the preceding requirements are not officially supported.

## Supported Languages

- Chinese (Simplified)
- English
- French
- German
- Japanese
- Korean
- Spanish (European)

## Firmware Version Support

In-Sight 5.7.0 software contains three firmware versions:

- In-Sight 5.7.0
- In-Sight 5.3.3
- In-Sight 4.10.5

In-Sight vision systems that have older firmware versions might work properly. However, some features are unsupported with older firmware versions and are not fully tested. For optimal performance, update vision systems that run older firmware to the most recent, supported firmware versions. For a list of models and supported firmware versions, see the Firmware Versions topic in the *In-Sight® Explorer Help* file.

### In-Sight Firmware 5.7.0

- In-Sight 2000 series vision sensors
- In-Sight 5705 and 5705C vision systems
- In-Sight 7000 Gen2 series vision systems
- In-Sight 8000 series vision systems
- In-Sight 9000 series vision systems

### In-Sight Firmware 5.3.3

- In-Sight Advantage Engine

### In-Sight Firmware 4.10.5

- In-Sight Micro 1000 series vision systems
- In-Sight 5000 series vision systems (except In-Sight 5705 and 5705C vision systems)

- In-Sight 7000 series vision systems (except In-Sight 7000 Gen2 series vision systems)

## Microsoft .NET Framework 4.5

In-Sight software requires Microsoft .NET Framework 4.5. If the In-Sight software installer fails to detect Microsoft .NET Framework 4.5, it attempts to download and install it.

## New Features

New Feature	Applicable Firmware Version
Supports the new In-Sight 9912 and 9912C vision systems.	5.7.0
Added support for the Cognex URCaps plugin, that integrates with Universal Robots to enable a hand-eye calibration protocol for vision-guided pick and place applications between Cognex 2D vision systems and Universal Robots. This plugin uses the Cognex Robot Library for communicating between robots and the vision system. This feature is supported only through EasyBuilder for In-Sight vision systems, and is not supported on In-Sight 2000 vision sensors.	5.7.0
Added a Robot calibration tool, which links a vision tool to a robot calibration function, transforms the pixel coordinates to the pose, and automatically creates a calibration file in EasyBuilder. This tool is not supported on In-Sight 2000 vision sensors.	5.7.0
Added a Robot Guidance tool, which allows the vision system to communicate the location of the part to the robot. This tool is not supported on In-Sight 2000 vision sensors.	5.7.0
High Dynamic Range (HDR) is now supported to provide more evenly exposed images without overexposed or underexposed regions. Two HDR modes are supported: HDR and HDR+. Supported only on In-Sight 7905 and In-Sight 9912 monochrome vision systems.	5.7.0
The In-Sight 9902L line scan vision system now supports the In-Sight CIO-MICRO and CIO-1400 I/O modules.	5.7.0
Several improvements have been made to the In-Sight Web HMI: <ul style="list-style-type: none"> <li>• Added an Image Resolution option to the HMI Settings dialog.</li> <li>• Added support for loading and saving a job from and to a vision system/sensor, a local PC or a remote location.</li> </ul>	5.7.0
Added a new Spreadsheet Navigator pane, which provides an overview of the spreadsheet and allows you to navigate the job file quickly.	5.7.0 & 4.10.5
Added support for the passive FTP mode, which enables you to access an FTP client through a firewall that does not allow connections to be initiated from the outside.	5.7.0 & 4.10.5
Added the CC-Link IE Field Basic protocol to the Network Settings dialog as an Industrial Ethernet protocol selection.	5.7.0
Added the CC-Link IE Field Basic protocol to the Communication application step.	5.7.0

## Changes & Fixes

### Note:

- For changes and fixes in previous releases, see past In-Sight Explorer release notes. Release notes for previous 5.x.x releases are available in the *In-Sight Explorer*® Help file.
- The release notes include Change Request numbers (CR#) (where applicable) to better track known issues reported by Cognex Technical Support.

CR#	Change/Fix	Applicable Firmware Version
N/A	In-Sight Explorer can now be installed as a 32-bit or 64-bit application. Note the default installation path is unchanged, and In-Sight Explorer is installed to C:\Program Files (x86)\Cognex\In-Sight\In-Sight Explorer 5.x.x for both 32-bit and 64-bit operating systems.	5.7.0 & 4.10.5
N/A	For In-Sight 2000 series vision sensors, the EasyBuilder Pattern Location and Inspection tools have been changed to improve pattern finding accuracy and processing time for single pattern applications.  <b>Notes:</b> <ul style="list-style-type: none"> <li>The Patterns (1-10) tool has not changed.</li> <li>When attempting to load a job containing this tool configured on the In-Sight firmware 5.7.0 or later to an In-Sight vision sensor running firmware version 5.6.x earlier, an error message will display and the job load will fail.</li> </ul>	5.7.0
N/A	If a 9902L line scan vision system is upgraded from In-Sight firmware version 5.6.1 PR1 to In-Sight firmware version 5.7.0, the vision system RAM is increased from 512MB to 832MB. Note that if the vision system is later downgraded from In-Sight firmware version 5.7.0 to In-Sight firmware version 5.6.1, the vision system RAM is decreased to the original 512MB.	5.7.0
81794	The In-Sight 2000 series vision sensor now supports the Set Integer (SI), Set Float (SF), Set Event 8 (SE8), and Set Event and Wait 8 (SW8) basic Native Mode commands.	5.7.0
81464	You can now change the AcquireImage Clip Mode or Acquisition Duration parameter values while the In-Sight 9902L line scan vision system is Online without placing the vision system Offline first.	5.7.0
79652	For In-Sight 2000 series vision sensors, the maximum view connections (In-Sight Explorer, VisionView or Web HMI) has been increased to 3.	5.7.0
79547	The AIM DPM - Contract Compliance option in the VerifyIDCode function's Metrics drop-down list has been updated to ISO 29158 / AIM-DPM-Contract Compliance.	5.7.0
79345	When Web HMI is in use, you can now run PROFINET cyclic I/O faster than 8ms.	5.7.0
79072	The GetAIDescription function (Vision Data Access > GetAIDescription) and GetFieldIdentifier function (Vision Data Access > GetFieldIdentifier) have been updated to support the GS1 714 Application Identifier.	5.7.0 & 4.10.5 PR1
47619	The Set Limits button for EasyBuilder Inspection tools has been renamed to Auto Limits.	5.7.0

## Known Issues

**Note:** The release notes include Change Request numbers (CR#) (where applicable) to better track known issues reported by Cognex Technical Support.

CR#	Issue	Affected Firmware Version
82479	If you try to install the In-Sight Explorer 5.7.0 on a system with the Microsoft .NET Framework 3.5 disabled when the Windows updates are still being processed, you may receive an error message: Error installing Microsoft .NET Framework; Error code 0x800f081f. <i>Workaround:</i> Wait for the Windows updates to complete (reboot if necessary), then install the In-Sight Explorer 5.7.0.	5.7.0
82030	When you try to connect your vision system/sensor to the Web HMI for the first time, you may receive an error message: Permission error appears and connection is denied. <i>Workaround:</i> Before you connect your vision system/sensor to the Web HMI, reinstall or update the vision system/sensor firmware on the system.	5.7.0, 5.6.1 & 5.6.0
48478	If an In-Sight vision system that runs firmware 5.6.0 has a job with many instances of the ReadIDMax function, the job might require more memory than is available on the vision system. Any instances of the ReadIDMax function that exceed the available memory returns #ERR. For example, if an In-Sight 8405 vision system job contains more than 100 instances of the ReadIDMax function, you might encounter this problem.	5.7.0

CR#	Issue	Affected Firmware Version
45581	For In-Sight 7600/7800 series vision systems configured for CIP-Sync/PTP, 1588 synchronization accuracy through a transparent clock-switch might increase to more than 10µs offset from master.	5.7.0
42550	In-Sight models that run 5.1.0 and later firmware versions do not support In-Sight Track & Trace job files.	5.7.0
35828	If an industrial Ethernet communication protocol triggers the vision system, the JobPass signal is sent only if the job contains a WriteResultsBuffer function. This issue does not occur with EasyBuilder applications.	5.7.0
32479	<p>If you update the In-Sight vision system firmware while it is connected to a POWERLINK network, it results in a code 13710, with the vision system needing to be power cycled and the files restored (the firmware will be successfully updated, however).</p> <p><i>Workaround:</i> Before you update the vision system firmware, complete the following steps:</p> <ol style="list-style-type: none"> <li>1. Remove the vision system from the POWERLINK network, and connect the vision system to a network port on the same subnet as the computer that runs In-Sight Explorer.</li> <li>2. Power cycle the vision system.</li> <li>3. Update the firmware while the vision system in Ethernet mode.</li> <li>4. Place the vision system back onto the POWERLINK network.</li> <li>5. Power cycle the vision system.</li> </ol>	4.10.5