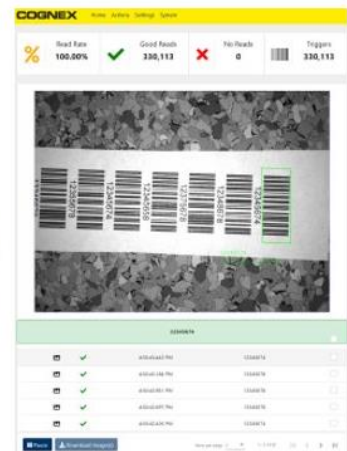


DataMan[®] Web HMI Reference Manual



2025 April 15
Revision: 25.2.0.9

Legal Notices

The software described in this document is furnished under license, and may be used or copied only in accordance with the terms of such license and with the inclusion of the copyright notice shown on this page. Neither the software, this document, nor any copies thereof may be provided to, or otherwise made available to, anyone other than the licensee. Title to, and ownership of, this software remains with Cognex Corporation or its licensor. Cognex Corporation assumes no responsibility for the use or reliability of its software on equipment that is not supplied by Cognex Corporation. Cognex Corporation makes no warranties, either express or implied, regarding the described software, its merchantability, non-infringement or its fitness for any particular purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by Cognex Corporation. Cognex Corporation is not responsible for any errors that may be present in either this document or the associated software.

Companies, names, and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, nor transferred to any other media or language without the written permission of Cognex Corporation.

Copyright © 2025. Cognex Corporation. All Rights Reserved.

Portions of the hardware and software provided by Cognex may be covered by one or more U.S. and foreign patents, as well as pending U.S. and foreign patents listed on the Cognex web site at: cognex.com/patents.

The following are registered trademarks of Cognex Corporation:

Cognex, 2DMAX, Advantage, AlignPlus, Assemblyplus, Check it with Checker, Checker, Cognex Vision for Industry, Cognex VSOC, CVL, DataMan, DisplayInspect, DVT, EasyBuilder, Hotbars, IDMax, In-Sight, Laser Killer, MVS-8000, OmniView, PatFind, PatFlex, PatInspect, PatMax, PatQuick, SensorView, SmartView, SmartAdvisor, SmartLearn, UltraLight, Vision Solutions, VisionPro, VisionView

The following are trademarks of Cognex Corporation:

The Cognex logo, 1DMax, 3D-Locate, 3DMax, BGAll, CheckPoint, Cognex VSoC, CVC-1000, FFD, iLearn, In-Sight (design insignia with cross-hairs), In-Sight 2000, InspectEdge, Inspection Designer, MVS, NotchMax, OCRMax, PatMax RedLine, ProofRead, SmartSync, ProfilePlus, SmartDisplay, SmartSystem, SMD4, VisiFlex, Xpand

Portions copyright © Microsoft Corporation. All rights reserved.

Portions copyright © MadCap Software, Inc. All rights reserved.

Other product and company trademarks identified herein are the trademarks of their respective owners.

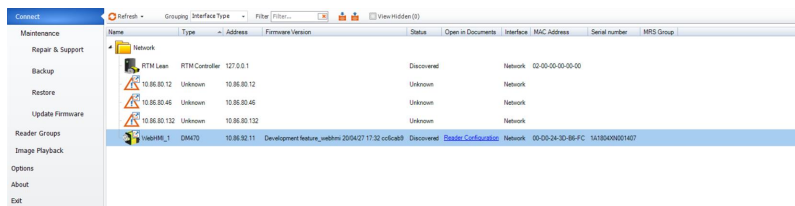
Overview

DataMan Web HMI allows to connect to an Ethernet-based DataMan reader from a web browser. DataMan Web HMI can be used as a runtime user interface or for service operation to visualize camera images, barcode strings, result history, performance statistics, and device information. Optional plug-in functionality allows to view live images, auto-tune, view and change reader settings, or save/ load configuration files.

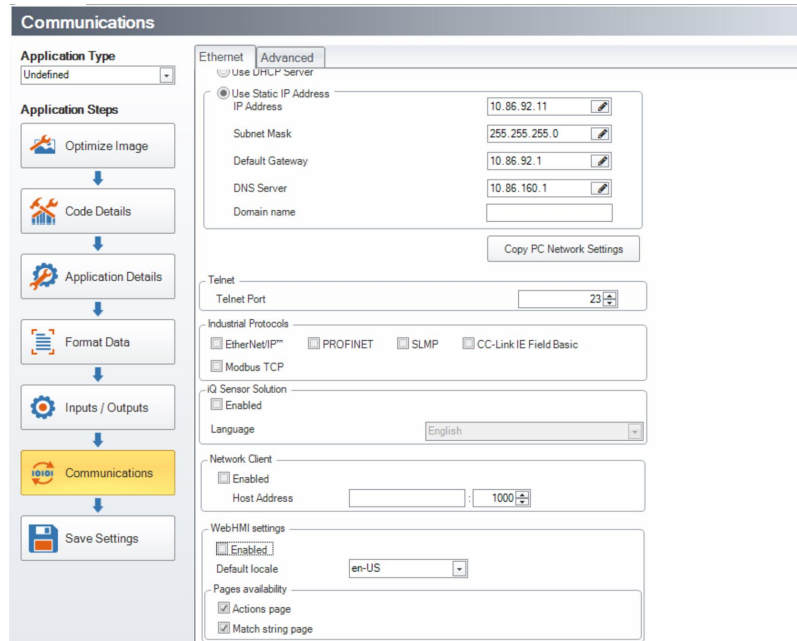
Supported web browsers	Google Chrome 61 or later Mozilla Firefox 75 or later Microsoft Edge 37 or later Apple Safari 13 or later
Recommended number of connections	1
Supported platforms	DataMan 470 series DataMan 470 series DataMan 280 series DataMan 80-PoE
Connection interface	Ethernet

Connecting

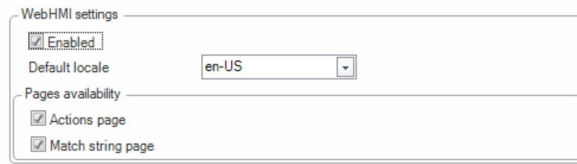
1. Open Setup Tool.
2. Select and connect to the reader to which WebHMI is to be enabled.



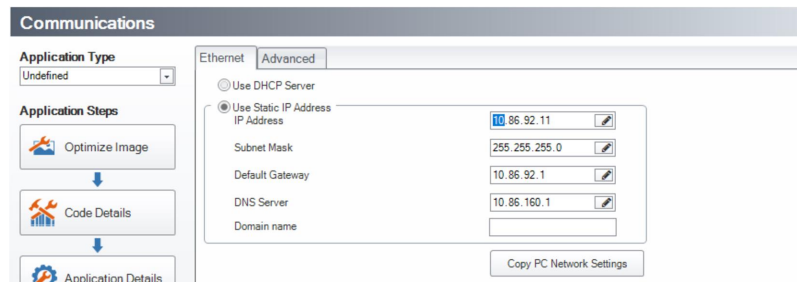
3. Click **Communications** under **Application Steps**.



4. On the **Ethernet** pane, enable WebHMI under **WebHMI settings**.



5. Check the **IP Address** of the reader.

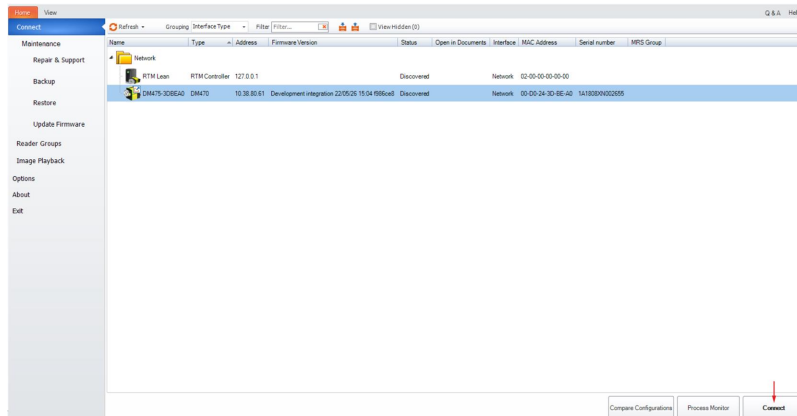


6. Open a supported web browser.
7. Fill in the **IP Address** of the reader into the address bar of the web browser and press **Enter**.

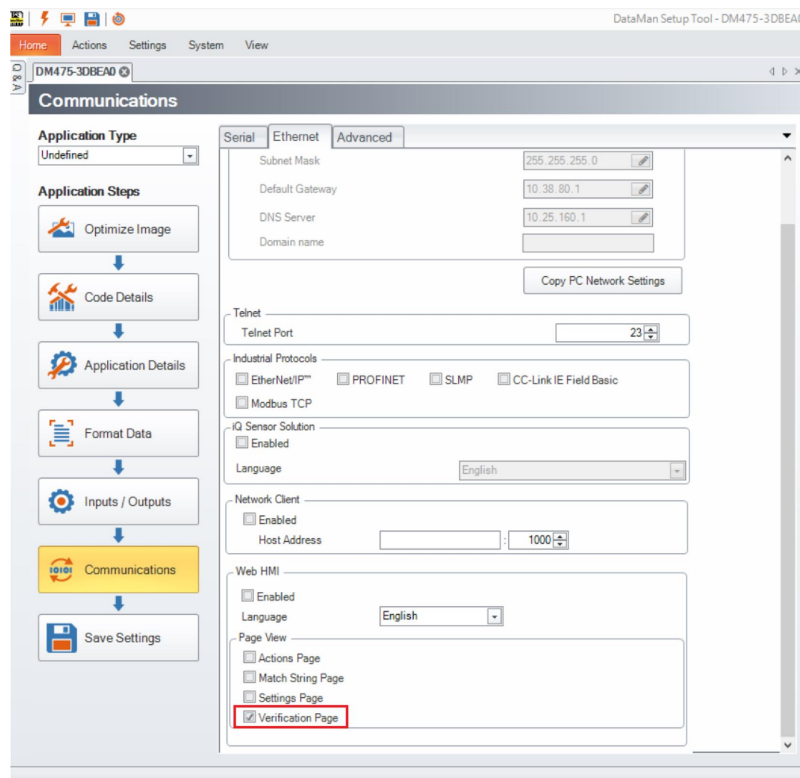
WebHMI Support for TruCheck Verification

In-Sight 6.1.13 and later versions provide WebHMI support for TruCheck Verification on DM374V, DM375V, DM474V, DM475V and SBG (Standards Based Grading) feature key enabled readers.

1. Open the DataMan Setup Tool.
2. Select and connect to a reader that has WebHMI support available for TruCheck Verification.

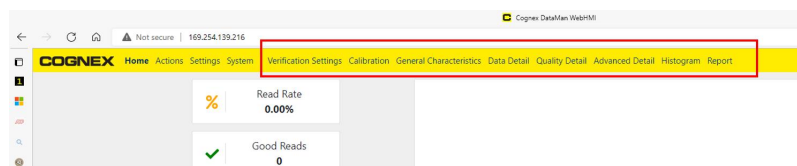


3. Click **Communications** under **Application Steps**. On the **Ethernet** pane, enable **Verification Page** under **Page View**.



4. Check the **IP Address** of the reader.

5. Open a supported web browser.
6. Fill in the **IP address** of the reader into the address bar of the web browser and press **Enter**.
7. When you enable the **Verification page** option, the WebHMI page includes new, verification-specific options in the WebHMI toolbar:



- The **Verification Settings** tab allows you to choose grading standards, applications, and other settings unique to TruCheck verification.
- The **Calibration** tab allows you to calibrate the unit prior to TruCheck verification to ensure accurate results.

The remaining tabs provide information about the verification result. The information provided is dependent on the symbology of the barcode:

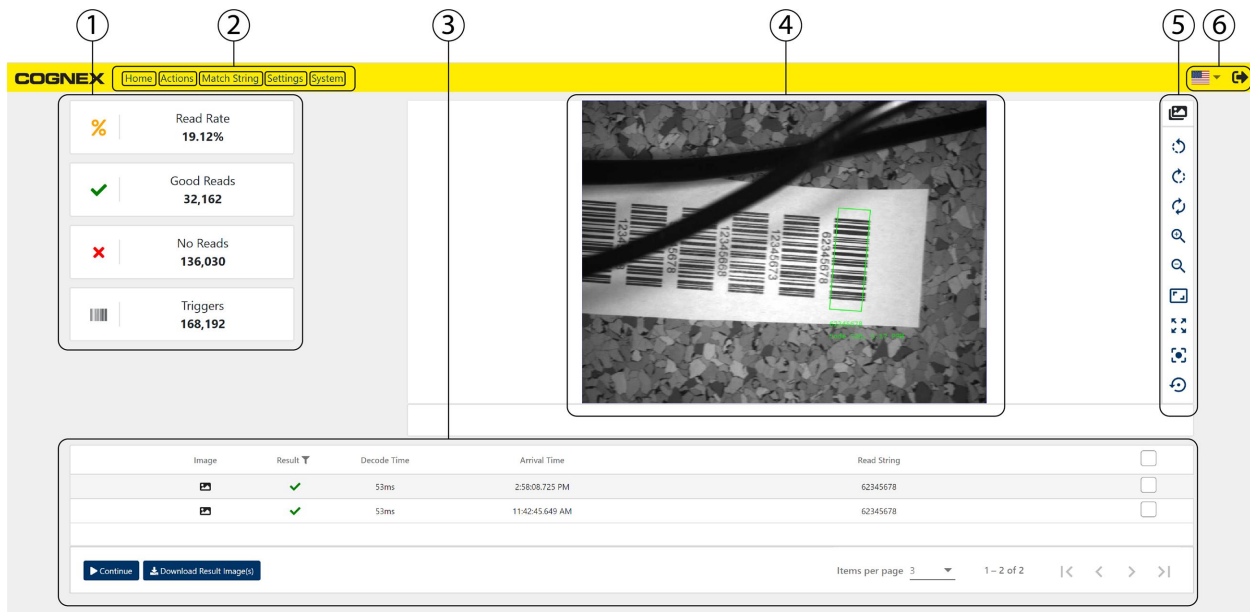
- The **General Characteristics** tab provides information about the characteristics of the barcode.
- The **Data Detail** tab provides information about the data encoded in the barcode.
- The **Quality Detail** tab displays the grades for the individual quality parameters.
- The **Advanced Detail** tab provides information about the analysis of the barcode.
- The **Histogram** tab is present for 2D barcodes only and provides a histogram of the modulation values.
- The **Report** tab shows a preview of the verification report.

For more information about **Verification Settings**, **Calibration**, or the different verification result tabs, see the *DataMan 475 Verifier Reference Manual*.

Note: To show the data on the verification result tabs, you have to select the verification result in the **Result History** pane.

Screens

Home



1	Statistics	Shows reader statistics and trigger information.
2	Menu	Home, Actions, Match String, Settings, and System page view tabs.
3	Result History	Lists the last 50 trigger results with corresponding details. Images can be selected and downloaded. Columns: - Image: image data available - Result: good read, no read, quality failure, validation failure - Decode time: amount of time needed for the decoding - Arrival time: the time when the image arrived - Read string: the code string being read Options: - Up to 50 customizable results stored in history - Filter option to control what images get stored in result history (e.g. store only no-read images). Click the filter icon next to Result to configure - Browsing result history: set items per page, navigate to next/previous/ first/ last result page - Pause/ Continue: pause/continue result infeed into results history - Download Result Image(s): download images (select single or all), only available when result infeed into results history is paused
4	Last Trigger Result View	Shows live view of the last image and the barcode string. Successfully read codes get green background, no-reads and other errors like code quality, or validation errors get red background.
5	Image Controls	Check/uncheck images to be stored in result history and appear in the image viewer, customize image display - rotate 90° left/right, zoom in/out, offset center
6	Language setting and Logout	Supported languages: English (USA), German, Spanish, French, Japan, Korean, Portuguese (Brazilian), Chinese (ZH). Logout button

Statistics	
Read Rate	Rate of good reads compared to the number of total triggers.
Good Reads	Number of good reads.
No Reads	Number of no reads.
Triggers	Total number of triggers.

Actions

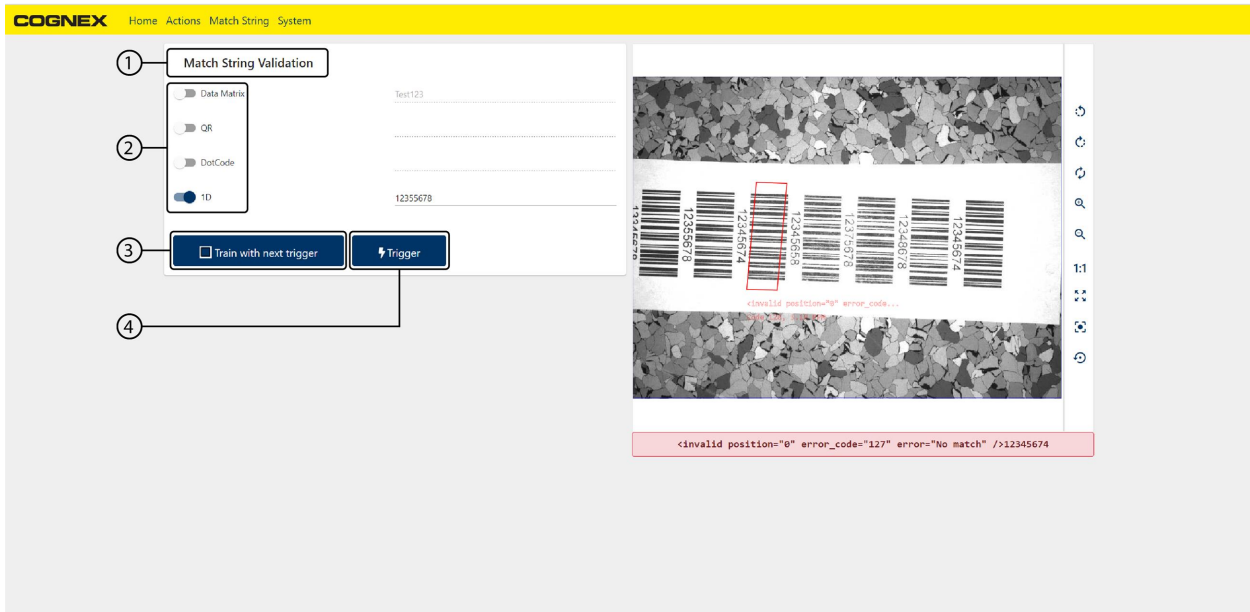


1	Trigger	Manually triggers the reader.
2	Live On/Off	Turns reader into Live mode.
3	Tune	Automatically tunes the camera and focus settings of the reader
	Optimize Brightness	This is a drop-down option under Tune. It can be used to adjust the brightness settings of the reader.
	Optimize Focus	This is a drop-down option under Tune. It can be used to adjust the focus settings of the reader.
4	Untrain/Train	Trains reader to different symbologies.

Match String

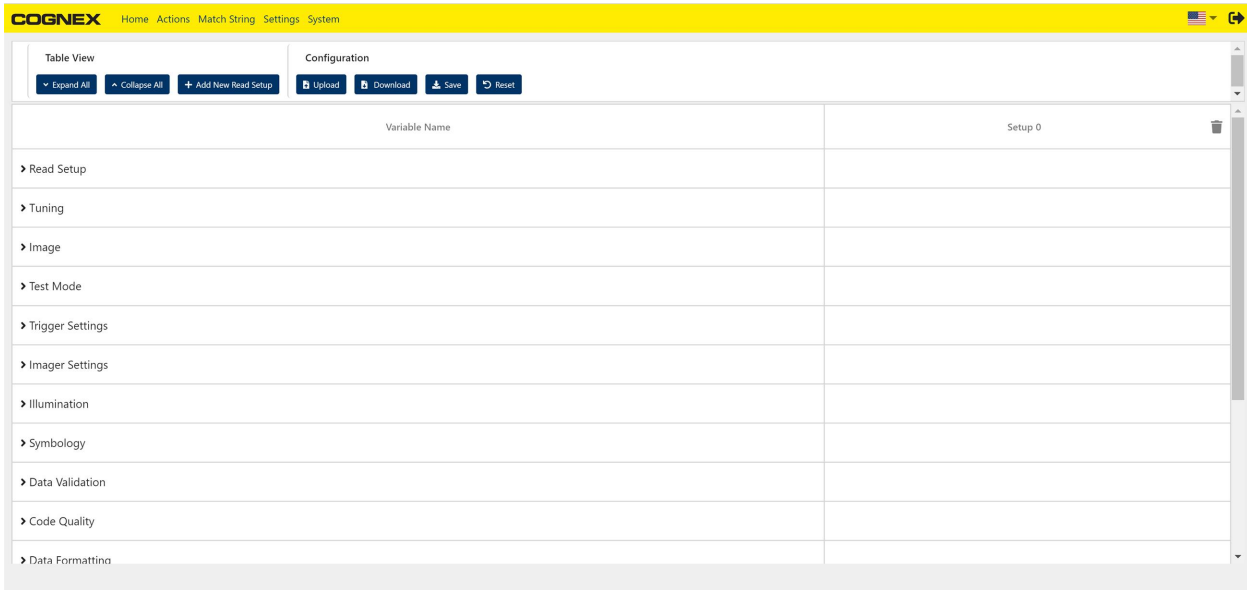
This function is used to manually enter or automatically learn a new match string.

Note: Automatic match string training only works with unformatted code strings.



1	Match String Validation	Ability to configure the reader to validate each decoded string against a trained match string.
2	Symbology Selection	Turn match string validation per symbology group on or off.
3	Train with next trigger	Select checkbox to automatically train reader for new match string.
4	Trigger	Click to manually trigger the reader.

Settings



Action Buttons	
Expand All	Expands all settings options.
Collapse All	Collapses all settings options.
Add New Read Setup	Adds a new setup configuration which can be used to set custom read parameters. Up to 16 setups can be stored.
Upload	Upload configuration to reader from storage (e.g. hard drive) .
Download	Download configuration from reader to storage (e.g. hard drive).
Save	Save configuration to the nonvolatile memory of the reader.
Reset	Reset reader configuration to factory default.

Note: The setting options in this screen present the reader parameters in a tree-view style which is similar to the **Table View** of the reader parameters in Setup Tool. For a detailed description of the setting options, see **DataMan® Setup Tool Reference Manual**.

System

The screenshot shows the COGNEX System interface with a yellow header bar containing 'COGNEX Home Actions Match String Settings System'. The main content area is divided into several sections:

- Device Information (1):** A panel containing fields for Device Model (DM474X), Serial Number (1A1804XN001407), Device Name (WebHMI_1), MAC Address (00-00-24-3D-B6-FC), IP Address (10.86.92.11), Firmware Version (Development feature_webhmi 20/04/27 17:32 cc6cab9), Installed Hardware (LiquidLens, Custom), Bootloader Version (2017.11-45-g87f355f), and OS Version (Development feature_webhmi 20/04/27 19:12 98770fb).
- Feature Keys (2):** A panel listing applied feature keys: 1DCodeQuality, 1DDataStitching, 1DExtendedRes, 2DCode, 2DCodeQuality, BarCode, DotCode, IDMax, FullSpeed, HDRPlus, IDQuick, ImageDownload, ImageFiltering, IntImageBuffer, LadderAndPicket, Omnidirectional, PostalCode, PowerGrid, Scripting, Validation.
- Device Time (3):** A panel showing Local Time (May 3, 2020, 4:58:32 AM) and Uptime (264h 30m 50s).
- Reader Statistics (5):** A panel with a 'Clear' button (4) and the following data:

Total Triggers: 168,192	Missed Triggers: 2,171,753
Total Reads: 32,162	Passed Validations: 12
Read Rate: 19.12%	Failed Validations: 0
Total No-Reads: 136,030	Buffer Overflows: 89,760
No-Read Rate: 80.88%	Trigger Overruns: 2,081,993
	Item Count: 0

1	Device Information	Shows reader information such as model, serial number, firmware version and network address.
2	Feature Keys	Shows applied feature keys.
3	Device Time	Shows Local Time and Uptime.
4	Clear	Click to clear reader statistics.
5	Reader Statistics	Shows advanced reader statistics including system errors.