

VisionView Web Reference Manual



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Precautions

To reduce the risk of injury or equipment damage, observe the following precautions when you install the Cognex product:

- The VisionView Web requires a UL or NTRL listed power supply with a 24 VDC output.
 Any other voltage creates a risk of fire or shock and can damage the components. Applicable national and local wiring standards and rules must be followed.
- This product is intended for industrial use in automated manufacturing or similar applications.
- The safety of any system incorporating this product is the responsibility of the assembler of the system.
- Do not install Cognex products where they are exposed to environmental hazards such as excessive heat, dust, moisture, humidity, impact, vibration, corrosive substances, flammable substances, or static electricity.
- Route cables and wires away from high-current wiring or high-voltage power sources to reduce the risk of damage or malfunction from the following causes: over-voltage, line noise, electrostatic discharge (ESD), power surges, or other irregularities in the power supply.
- Do not expose the image sensor to laser light. Image sensors can be damaged by direct, or reflected, laser light. If your application requires laser light that might strike the image sensor, use a lens filter at the corresponding laser wavelength. For suggestions, contact your local integrator or application engineer.
- This product does not contain user-serviceable parts. Do not make electrical or mechanical modifications to product components. Unauthorized modifications can void your warranty.
- Changes or modifications not expressly approved by the party responsible for regulatory compliance could void the user's authority to operate the equipment.
- Include service loops with cable connections.
- Ensure that the cable bend radius begins at least six inches from the connector. Cable shielding can be degraded or cables can be damaged or wear out faster if a service loop or bend radius is tighter than 10X the cable diameter.
- This device should be used in accordance with the instructions in this manual.
- All specifications are for reference purposes only and can change without notice.

Symbols

The following symbols indicate safety precautions and supplemental information:

MARNING: This symbol indicates a hazard that could cause death, serious personal injury or electrical shock.

CAUTION: This symbol indicates a hazard that could result in property damage.

(i) Note: This symbol indicates additional information about a subject.

Tip: This symbol indicates suggestions and shortcuts that might not otherwise be apparent.

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Getting Started

This section provides general information about VisionView Web.

About VisionView Web



The VisionView Web family of devices allows you to automatically connect to run-time Web HMIs from Cognex devices on the factory floor. The product family includes a touchscreen version and a screenless version that can connect to a third-party screen over HDMI. The VisionView Web offers you the following functionalities:

- · Automatically detect and connect to both In-Sight and DataMan Web HMIs on the factory floor.
- Tile multiple Web HMIs on one screen.
- Load and save jobs, change online status, and view run-time data.
- · Offload images and job files to SD cards or USB drives.
- · Configure network settings and admin passwords from the VisionView Web.
- · Supported by In-Sight Vision Suite.

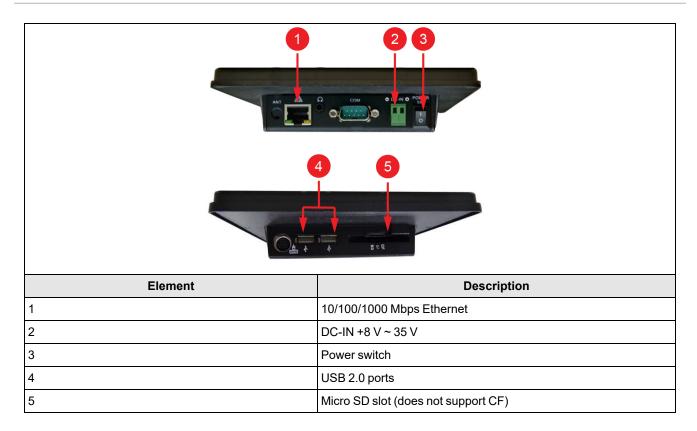
Product Overview

The following VisionView Web products are available:

Product Name	Product Image	Features
VisionView Web Panel	DONNEGED :	9" display (1024x600 resolution)
VisionView Web HDMI	COGNEX	HDMI display output (1920x1080 max resolution)

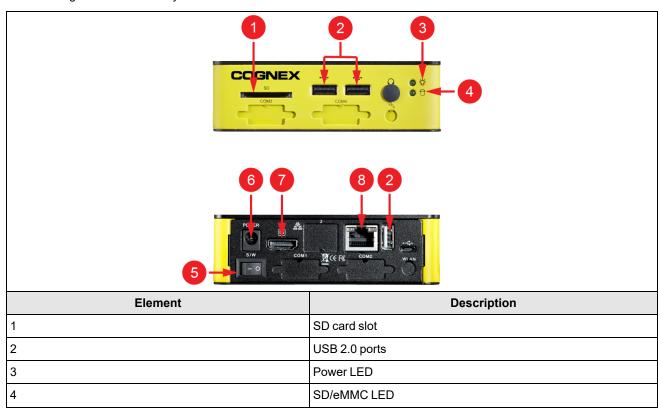
VisionView Web Panel Layout

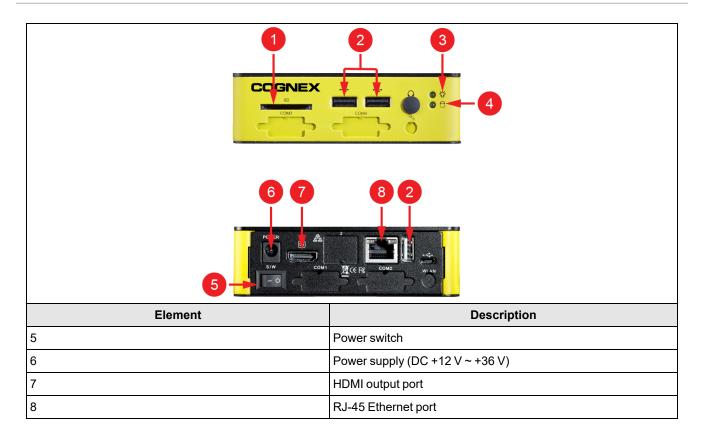
The following table shows the layout of the VisionView Web Panel.



VisionView Web HDMI Layout

The following table shows the layout for the VisionView Web HDMI:

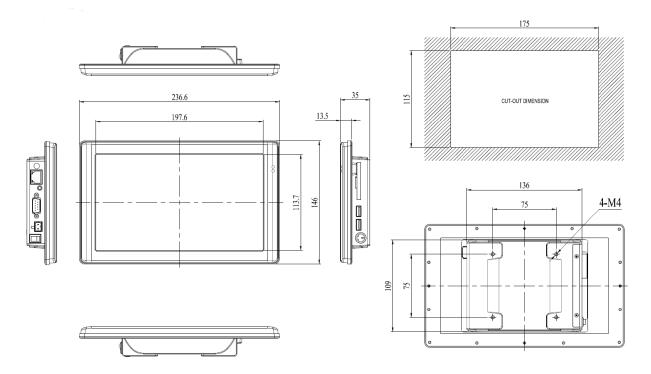




Dimensions

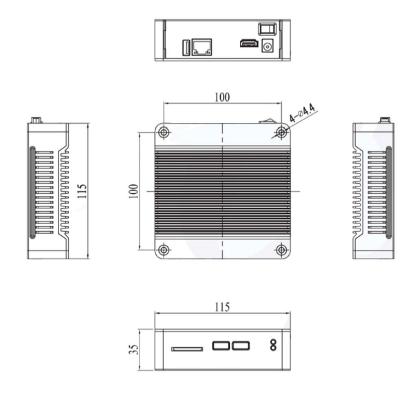
VisionView Web Panel Dimensions

The following figure shows the dimensions for the VisionView Web Panel.



VisionView Web HDMI Dimensions

The following figure shows the dimensions for the VisionView Web HDMI.



Mounting Options

You can purchase the following components separately. For a list of options and accessories, contact your local Cognex sales representative.

Mounting Options for VisionView Web Panel

You can install the VisionView Web Panel in an electrical panel to retain IP65 environmental rating. See <u>Mount VisionView</u> <u>Web Panel to Custom Bracket on page 16</u> for instructions on how to properly mount the device. Use the optional FastMount bracket to speed up this process.

Accessory	Product Number	Illustration
FastMount bracket	820-20907-001	

You can also use general mounting solutions, which lower the environmental rating below IP65.

Accessory	Product Number	Illustration	
Table top stand	820-0272-1R		
2-inch swivel link single arm kit	CSL-AFSB-1002	•	
4-inch swivel link single arm kit	CSL-AFSB-1004		
6-inch swivel link single arm kit	CSL-AFSB-1006		
8-inch swivel link single arm kit	CSL-AFSB-1008		
Swivel link mounting plate	CSL-AFSB-9		

Installation

This section describes the installation process.

Mounting

To mount the VisionView Web HDMI, you can, for example, attach it to the back of your monitor or use a VESA-compliant solution. For more information on VESA-compliance, see vesa.org.

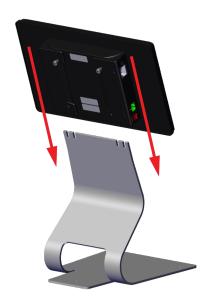
To mount the VisionView Web Panel, use one of the following procedures depending on your preferred mounting option.

Mount VisionView Web Panel on Table Top Stand

1. Insert two M4 hex screws to the top mounting holes of the VisionView Web panel without fully tightening them.



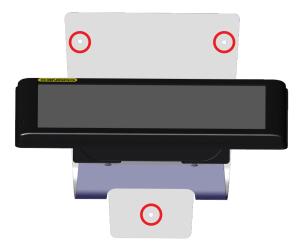
 $2. \quad \text{Slide the VisionView Web panel on the table top stand so that the screws catch onto the notches in the stand}.$



3. Tighten the screws completely.



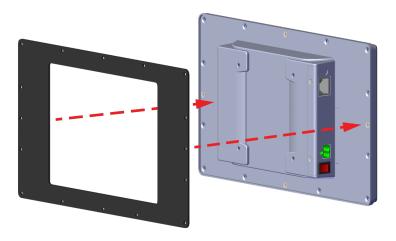
Optionally, you can use the three screw holes on the bottom of the stand to attach the table top stand to a horizontal surface.



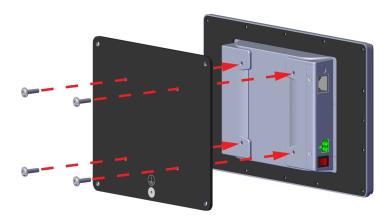
Mount VisionView Web Panel to FastMount Bracket

You can use the FastMount bracket to attach the VisionView Web Panel to any surface that has a suitable opening to accommodate the device. For the required size of the cutout, see <u>VisionView Web Panel Dimensions</u> on page 8.

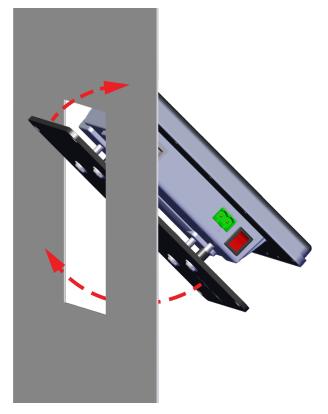
1. Attach the gasket to the back of the VisionView Web panel.



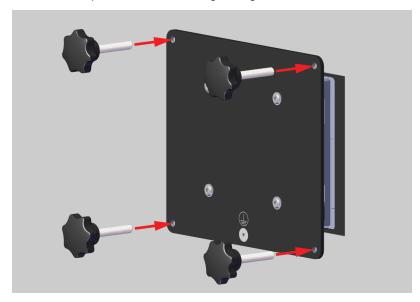
2. Position the FastMount bracket to the back of the VisionView Web panel. Align the mounting holes of the bracket with the screw holes of the panel, then insert and tighten the four hex screws.



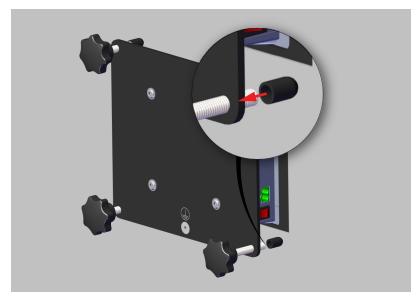
3. Rotate the VisionView Web panel and insert it into the cutout until the gasket is flush with the mounting surface.



4. Insert the four fasteners into the respective holes without tightening them.



5. Slide on the end cap of each fastener.

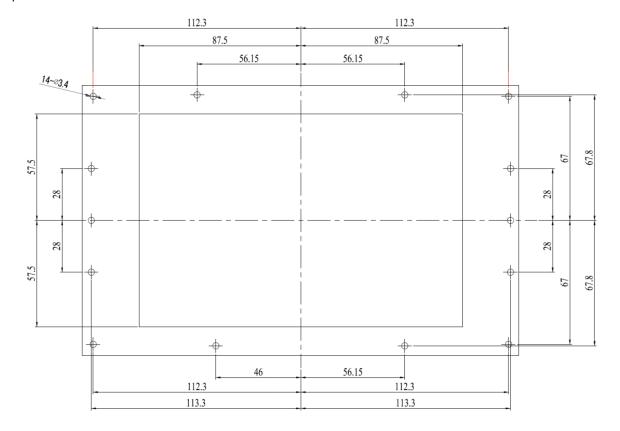


6. Hand-tighten all four fasteners until the VisionView Web panel is securely fixed.



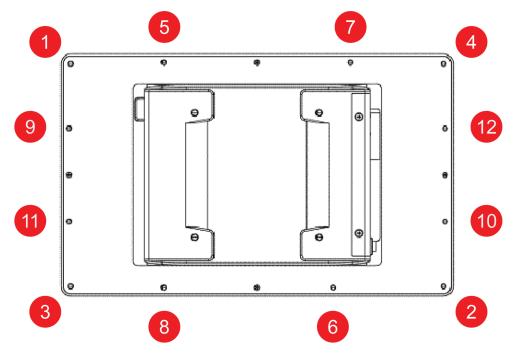
Mount VisionView Web Panel to Custom Bracket

1. Cut the screw holes into the bracket. Refer to the following image for the locations of the holes. The values are provided in millimeters.



Tip: Cut the holes in the bracket using a professional machine shop.

2. If necessary, remove the twelve M3 screws from the VisionView Web panel in a diagonal pattern, as shown on the image below:



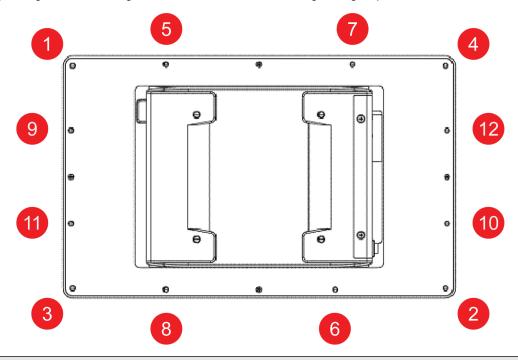
- 3. Place the VisionView Web panel face-down on a clean, flat surface.
- 4. Slide the bracket around the back of the VisionView Web panel until the bracket rests directly on the gasket. Align the screw holes with the mounting holes on the VisionView Web panel.
- 5. Insert all twelve M3 screws into the mounting holes and screw them in until they are finger-tight.

Note:

The screw size is M3×L (L=wall thickness + 6.0 mm).

The required length for all twelve M3 screws changes according to the thickness of mounting bracket. For example, the length of a standard M3 screw for the VisionView Web panel is 6 mm. If the thickness of your mounting bracket is 3 mm and washer thickness is 1 mm, you have to use 10 mm M3 screws.

6. Finish tightening the screws using an M3 screwdriver. Observe the tightening sequence shown below:



(i) Note: The maximum torque is 1.18 Nm.

Connecting the VisionView Web

To use the VisionView Web HDMI:

- 1. Plug in the power cable.
- 2. Connect to the network using an Ethernet cable.
- 3. Connect to an external display using an HDMI cable.

To use the VisionView Web Panel:

- 1. Plug in the power cable.
- 2. Connect to the network using an Ethernet cable.

Once your VisionView Web device is powered and connected, turn on the device to access the VisionView Web application.

VisionView Web User Interface

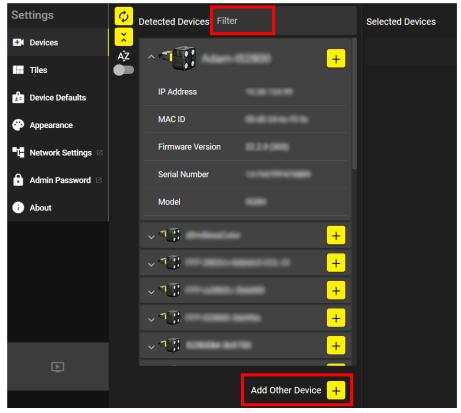
Devices

The Devices page of VisionView Web contains the **Detected Devices** list and the actions you can perform with the devices, such as selecting a detected device or adding an undetected device for display on the Tiles page.

Detected Devices

After the VisionView Web application runs, the **Detected Devices** list automatically populates with discovered devices. Choose the device you want to connect to from the **Detected Devices** list.

If you see no devices on your network or if you want to add a device that is not a Cognex device, click on **Add Other Device** at the bottom of the **Devices** page. To filter the devices you want, enter the related information into the **Filter** field.



Icon	Button name	Description
\$	Refresh Detected Devices	Refreshes the detected devices in the list.
×	Expand all device details	Allows you to see all device details.
	Toggle device grouping	Allows you to toggle the display of devices by type or alphabetically.

When you click on Add Other Device, the Device Configuration pop-up appears.



The Tiled URL and Full Screen URL fields are mandatory. All other fields are optional.

To see a specific user interface on the tiles:

- 1. Enter the URL in the Tiled URL field of Device Configuration. For example, add WebHMI URLs.
- 2. Click on the check mark button to add the device you configure to the Selected Devices list.

Selected Devices

To add already discovered devices from the **Detected Devices** list to the **Selected Devices** list, click on the **Add** button next to the device you want, or drag the device to the top of the **Selected Devices** list.

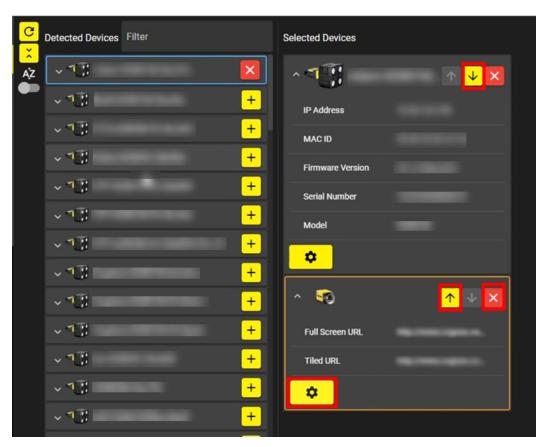


You can determine the order of the devices in the **Selected Devices** list by clicking on the **Up** or **Down** buttons next to the device you want, or you can drag and drop the devices into the list. You can also remove the device from **Selected Devices** by clicking on the **Remove** button.

After you expand the device information, the Settings button appears.



To configure the device further, click on the **Settings** button.

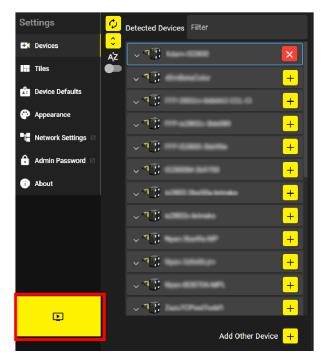


The Device Configuration window opens.

For some devices, you can toggle **Override Credentials** to enter in a custom **User Name** and **Password**. Also, you can toggle **Use Custom URLs** to set your own **Full Screen** and **Tiled** URLs.



Then click on the **Run** button in the bottom left corner of the page, to switch to the Run Mode.

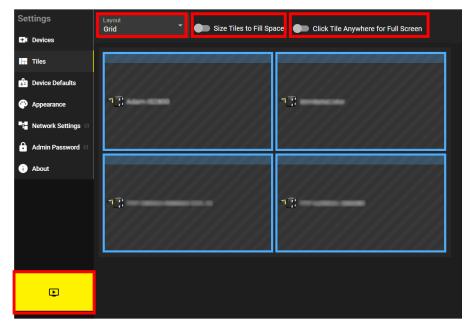


For more information, see *Tiles* on page 22.

Tiles

The **Tiles** page of VisionView Web displays tiles for the devices in the **Selected Devices** list. For more information on **Selected Devices**, see *Devices* on page 19.

For example, if you add four devices, then the **Tiles** page displays the following:



The drop-down **Layout** menu allows you to choose the display style:

- Grid
- Showcase

- Row
- Column

You can toggle the **Size Tiles to Fill Space** to control the scale of the tiles. You can toggle the **Click Tile Anywhere for Full Screen** to enable opening a tile in full-screen mode when you click on it.

To view the run mode, click on the **Run** button. Run mode displays a live feed from the web user interface of the devices.



To go into full-screen mode, click on the **Maximize** button or any part of the tile header.

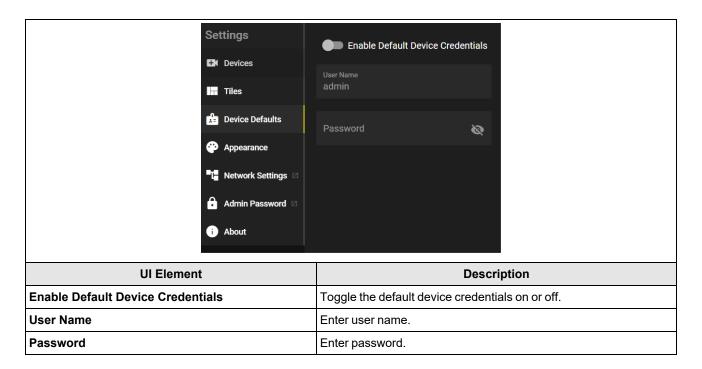
Select the menu button in the left-hand corner. The **Reload** button allows you to reload run mode. The **Configure** button allows you to return to **Settings**.



Device Defaults

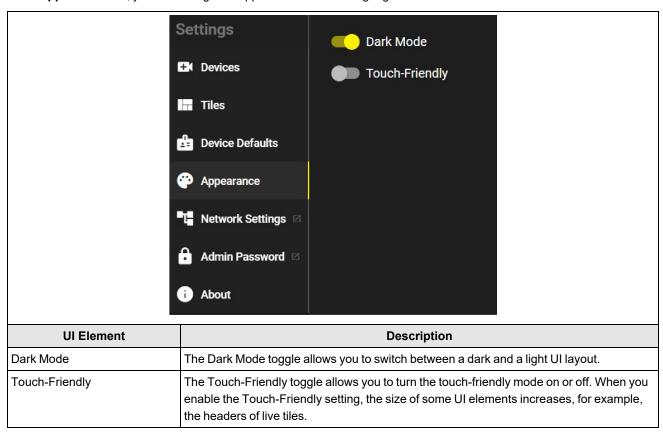
This page allows you to configure login credentials for the Web HMI of Cognex devices.

Note: All selected devices use these credentials unless specifically overridden by individual device configuration. See <u>Devices on page 19</u> for configuration instructions.



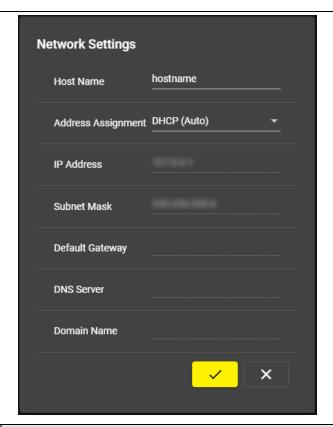
Appearance

In the Appearance tab, you can change the appearance and the language.



Network Settings

In the **Network Settings** pop-up, you can configure your network settings.

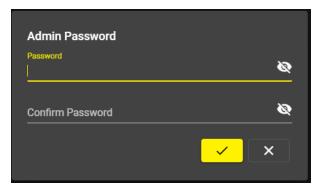


UI Element	Description			
Host Name	Name of the VisionView Web device.			
Address Assignment	DHCP (Auto)			
	Note: If you use the DHCP (Auto) setting, then only the Host Name is configurable.			
	Static			
	Note: If you use the Static setting, you have to fill the Host Name, IP Address, and Subnet Mask fields.			
IP Address	Enter the VisionView Web IP address.			
Subnet Mask	Enter the VisionView Web subnet mask.			
Default Gateway	Enter the default gateway.			
DNS Server	Enter DNS server name.			
Domain Name	Enter the domain name.			

Admin Password

In the Admin Password pop-up, you can change the VisionView Web admin password.

Note: When the admin password is set, you must enter it before configuring the VisionView Web device or performing any actions on it from the In-Sight Vision Suite.

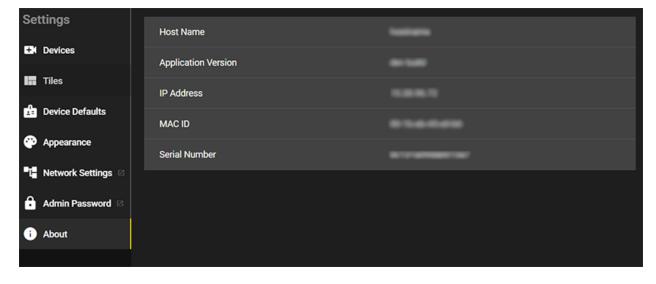


To change the admin password, perform the following steps:

- 1. Enter a new password into the **Password** row.
- 2. Enter the new password again into the **Confirm** row.
- 3. Click on the checkmark button to finish the process.

About

The **About** page of VisionView Web displays information about the device.



VisionView Web Specifications

The following sections list general specifications of the VisionView Web devices.

VisionView Web Panel Display Specifications

Specification	Description		
Micro SD Card	Micro SD Slot × 1		
LCD	9" WSVGA TFT-LCD		
Resolution	1024 x 600		
Touchscreen	Resistive / Capacitive		
USB	USB 2.0 × 2		
Ethernet	Integrated 10/100/1000 Mbps Ethernet		
Power Input	Multi-Voltage +8 ~ +35 V DC		
Operating Temperature	0°C to +60°C		
Storage	-30°C to +80°C		
Humidity	0% ~ 90% relative humidity, non-condensing		
IP Rating	IP65 (front panel)		
Shock	Yes		
Vibration	Yes		

VisionView Web HDMI Specifications

Specification	Description
SD Card	SD Slot × 1
USB	USB 2.0 × 3 (front × 2 + rear × 1)
Ethernet	RJ45 × 2 (Intel I120 GbE × 1/CPU GbE × 1)
Power Input	DC +12 V to +36 V input
Operating Temperature	0°C to +60°C
Storage	-30°C to +80°C
Humidity	0% ~ 90% relative humidity, non-condensing

Cleaning and Maintenance

To clean the outside of the chassis, use a dry cleaning cloth.



CAUTION: Do not clean VisionView Web products with liquids.



CAUTION: Do not attempt to clean any VisionView Web product with harsh or corrosive solvents, including lye, methyl ethyl ketone (MEK) or gasoline.

Regulations and Conformity

Note: For the most current CE declaration and regulatory conformity information, see the Cognex support site: cognex.com/support.

Safety and Regulatory			
Manufacturer	Cognex Corporation One Vision Drive Natick, MA 01760 USA		
C€	Model Names: Regulatory Models EB-8MM-20920 and PN8M-090T-20919 This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take immediate measures. This equipment complies with the essential requirements of the EU Directive 2014/30/EU. Declarations are available from your local representative.		
EU RoHS	Compliant to the most recent applicable directive.		
FCC	FCC Part 15, Class A This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.		
Korea	Regulatory Models R-R-Del-EB-8MM-20920 and R-R-IC6-PN8M090T-20919 This device is certified for office use only and if used at home, there can be frequency interference problems.		
TÜV	Regulatory Models EB-8MM-20920 and PN8M-090T-20919		
	NRTL: TÜV SÜD NRTL OSHA Scheme for UL/CSA 62368-1.		
	CB report available upon request. TÜV SÜD, IEC/EN 62368-1.		

中国大陆RoHS (Information for China RoHS Compliance)

根据中国大陆 电子信息产品污染控制管理办法》(也称为中国大陆RoHS),以下部份列出了本产品中可能包含的有毒有害物质或元素的名称和含量。



	Hazardous Substances 有害物质					
Part Name 部件名称	Lead (Pb) 铅	Mercury (Hg) 汞	Cadmium (Cd) 镉	Hexavalent Chromium (Cr (VI)) 六价铬	Polybrominated biphenyls (PBB) 多溴联苯	Polybrominated diphenyl ethers (PBDE) 多溴二苯醚
Regulatory Models EB-8MM- 20920 and PN8M-090T- 20919	Х	0	0	0	0	0

This table is prepared in accordance with the provisions of SJ/T 11364.

这个标签是根据SJ/T11364的规定准备的。

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB / T26572 - 2011.

表示本部件所有均质材料中含有的有害物质低于GB/T26572-2011的限量要求。

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB / T26572 - 2011.

表示用于本部件的至少一种均质材料中所含的危害物质超过GB/T26572-2011的限制要求。

For European Community Users

Cognex complies with Directive 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on waste electrical and electronic equipment (WEEE).

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.

The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You may also contact your supplier for more information on the environmental performance of this product.