



VISOR[®]

Web user manual

Software version 2.12

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1 Information on this document

1.1 What the symbols mean

Warnings



CAUTION or WARNING or DANGER

This symbol is used to indicate a potentially hazardous situation that, if not avoided, could result in death or serious injury.



WARNING

This symbol is used to indicate potentially hazardous situations arising from laser beams.



ATTENTION:

This symbol is used to indicate text that must be observed without fail. Failure to do so may result in bodily injury or property damage.



NOTE:

This symbol is used to highlight useful tips and recommendations, as well as information intended to help ensure efficient operation.

VISOR® SensoConfig Web

- | | |
|---|-----------------------------|
| Sensor, device settings | Output |
| Job | Monitoring |
| Image setting | Statistic |
| Detectors | Settings, software settings |
| Start sensor, start job, create and execute job | Code reader wizard |
| Notes on quality parameters | |



Detectors







NOTE:

Currently, the Datacode and Barcode detectors are available for editing. All other detectors are only available for monitoring and statistics. All comprehensive functions can be found in the PC-based SensoConfig.

- | | |
|---------------|-------------------|
| Data code | Contour |
| Barcode | Pattern matching |
| OCR | Contour 3D |
| Brightness | BLOB |
| Contrast | Target Mark 3D |
| Contour check | Shape find |
| Grayscale | Caliper |
| Color value | Caliper, circle |
| Color area | Result processing |

-  Classification (AI)
-  Color list

Alignment

-  Pattern matching
-  Edge detection
-  Contour comparison
-  Circle

1.2 Additional documents

The following documents for the VISOR® vision sensor are available for download in the Download area of the SensoPart website.

- VISOR® Operating manual
- VISOR® User Manual
- VISOR® Communications manual
- VISOR® Web user manual

Furthermore, these documents are part of the software installation and can be found in the subfolder "...\Documentation", as well as via the Windows Start menu.

1.3 Document version

This manual describes the VISOR® SensoConfig Web software version 2.12.

2 Intended use

The VISOR® SensoConfig Web software is used to monitor and configure the VISOR® vision sensor.

2.1 Field of application

VISOR® Code Reader:

The identification of products, components or packaging using printed or directly marked codes and plain text that are nailed or lasered.

2.2 Requirements for use

A PC or notebook with the following minimum equipment is required to configure the VISOR® vision sensor:

- Processor: Intel 64 or AMD 64 SSE2 (AVX2 dispatch)
- Architecture: 64 bit
- Clock rate: 1.5 GHz
- Memory: 4 GB RAM
- Operating system Microsoft Windows 10 or Windows 11
- Network connection: RJ-45 LAN connection, network with TCP-IP protocol
- Screen resolution: at least 1024 x 768 pixels

The default network settings for the VISOR® vision sensor are 192.168.100.100 for the IP address, 255.255.255.0 for the subnet mask, and 192.168.100.1 for the gateway.

The VISOR® vision sensor does not need a PC or PLC to run. A PC / laptop is required only in order to configure the VISOR® vision sensor.

Attention must be paid to sufficient and constant object illumination to ensure reproducible results and avoid malfunction. Light reflections or changing extraneous light can distort evaluation results. If this cannot be achieved with the internal lighting, an external light source or light protection devices must be used to protect against extraneous light.

3 Product identification and characteristics

3.1 VISOR® Vision software

The VISOR® Vision software consists of the four modules "SensoFind", "SensoConfig", "SensoView" and "SensoConfig Web".

Additional information: [VISOR® User manual 068-14797](#), chapter "VISOR® Vision software – Overview and quick guide"

Download

The VISOR® Vision software Setup is available for download at www.sensopart.com (Download/Software...).

3.2 Overview of functions

Further information on all VISOR® vision sensors and their functions can be found on our website:

- www.sensopart.com/de
- www.sensopart.com/en
- www.sensopart.com/fr

Alternatively, the functions currently available for the VISOR® vision sensor can also be viewed via the following QR codes:

DE



EN



FR



4 Installation

4.1 Network connection

The following instructions explain how to modify the network configuration for the PC and the VISOR® vision sensor. If incorrect settings are used, the network connections in the computer may be lost. To be on the safe side, note the former settings and reuse them if required. Following this procedure, it may be necessary to restart the system. In order to determine which IP address is allowed in your network or locally on your PC, and to carry out the necessary settings on your PC, please contact the responsible system administrator or administrator beforehand. The illustrations, dialogues and menus used are taken from Microsoft Windows 10 operating system. The illustrations are similar in other operating systems.

4.1.1 Basic settings of the PC and the VISOR® vision sensor

Prerequisite for configuring the VISOR® vision sensor with a PC: PC with network card and an installed TCP or IP LAN connection, even if the PC is not connected to a network. The VISOR® supports the automatic detection of the Ethernet transmission rate, but a maximum of 100 MBit. The internet protocol IPv4 must be activated. There are two ways to configure the VISOR® vision sensor. Network connection and direct connection.

4.1.2 Direct connection - Setting the IP address of the PC

To connect the VISOR® vision sensor to a computer via Ethernet, the IP address settings of the two devices must correspond to each other. The default setting for the VISOR® vision sensor's IP address is 192.168.100.100 / 24 with a subnet mask of 255.255.255.0. For direct connection, the PC must be set to a fixed IP address suitable for the sensor, as follows:

1. Clicking on Start / Control Panel / Network Connection / LAN Connection / Properties opens the dialog window "Local Area Connection Properties".
2. In the list "This connection requires the following elements", select the option "Internet Protocol (TCP/IP)" and click the button "Properties".
3. In the following window, set the desired IP address and subnet mask of the PC.
4. Confirm entries with OK.

Example:

The VISOR® vision sensor comes with its IP address set to 192.168.100.100 and its subnet mask set to 255.255.255.0. In the example, the IP address can be selected from 192.168.100.1 to 192.168.100.254 with the subnet mask set to 255.255.255.0 - with the exception of the IP address of the sensor (192.168.100.100). Do not use network addresses .0 and .255 as device addresses, as these are usually reserved for network infrastructure such as servers, gateways, etc.

Further information on changing the sensor IP address: [VISOR® User manual 068-14797](#), chapter "Network settings of the sensor"

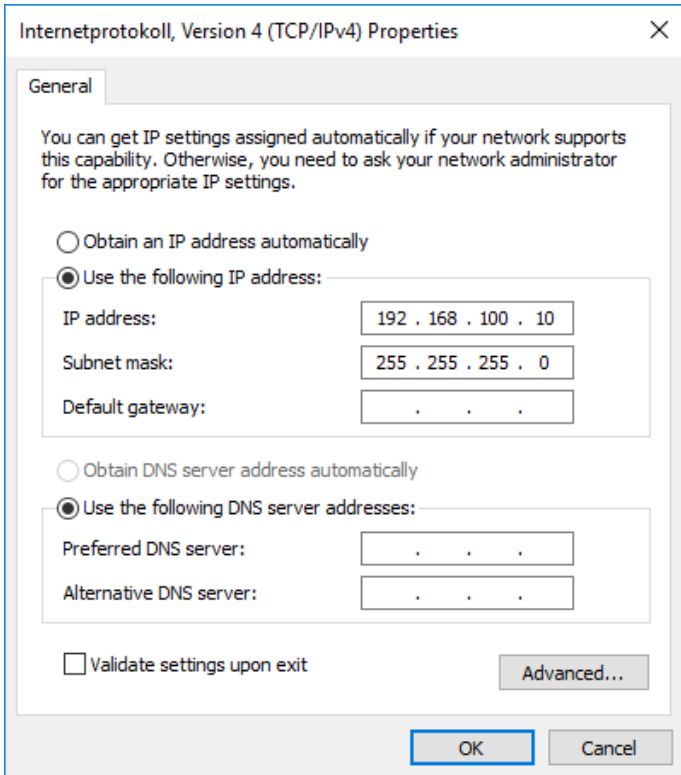


Fig. 1: PC IP Setup

4.1.3 Network connection - Setting the IP address of the VISOR® vision sensor

Before connecting the sensor to the network, check with the network administrator whether the sensor's address has already been assigned (default: 192.168.100.100 with subnet mask 255.255.255.0). This can otherwise cause network failure.

Setting the sensor IP address:

NOTE:



If the sensor IP is already in use, then first connect the sensor and the PC via a direct connection and set a permissible IP address in the sensor. Connection via the network can then be carried out. First ensure electrical connection and installation of PC software has been completed. To set the IP address on the VISOR® vision sensor, carry out the following steps in the PC software.

If the IP is still available, then connect the sensor to the network and set the IP address of the sensor in accordance with the administrator's specifications as follows.

1. Start SensoFind.
2. Select the VISOR® vision sensor you want from the list of active sensors.
3. Set sensor's new IP address with the "Set" button. The IP address is assigned by your system administrator. The PC's IP address is shown in the status bar under the buttons. Some PCs have more than one Ethernet connection.
4. Select the sensor and connect via SensoConfig or SensoView.

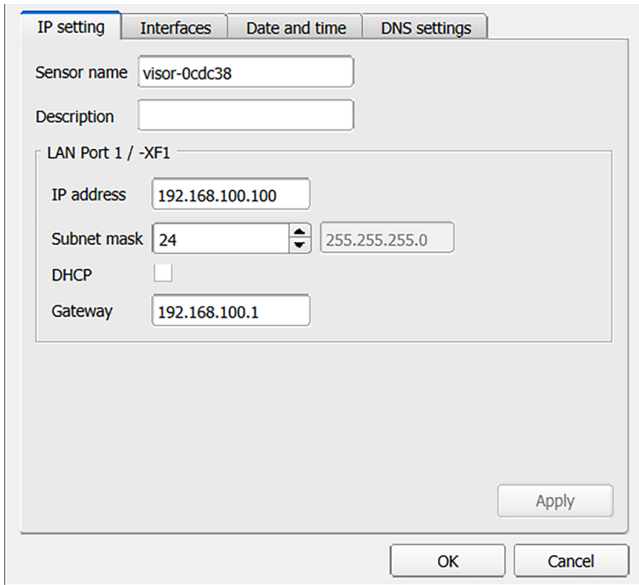


Fig. 2: VISOR® IP setup

Modification of the standard gateway enables operation in different sub-networks. Only alter this setting after consultation with your administrator. Automatic integration of a new computer or sensor into the existing network without manual configuration is possible through DHCP. Normally, only the automatic reference of the IP address must be set at the sensor on the client. When the sensor is started on the network, it can obtain the IP address, net mask, and gateway from a DHCP server. Activation of the DHCP mode is carried out via the "Settings" button by activating the checkbox "DHCP". Since this means that the exact same VISOR® may have different IP addresses at different times, a sensor name must be assigned when enabling DHCP. If there are multiple VISOR® sensors on a network, each one must be assigned its own unique name.

When a VISOR® with DHCP is switched on on a network with no DHCP server, the IP address is automatically set to 0.0.0.0. on the part of the VISOR®. This can occur, for example, in the event of a power or server failure or in the event that the system is restarted. The reason for this is that the DHCP server may boot more slowly than the VISOR®. Make sure that the VISOR® is turned on only after the DHCP server is available.

5 VISOR® SensoConfig Web

VISOR® SensoConfig Web is used to configure, monitor / verify connected sensors and to analyze test results.

The display is provided in the browser (no software installation required for the display).

The following browsers are supported (specified version and newer):

- Microsoft Edge 120
- Mozilla Firefox 121
- Google Chrome 120
- Apple Safari 17.0

5.1 Start VISOR® SensoConfig Web

1. In SensoFind click on Web.

Browser opens with the IP address of the sensor (default "http://192.168.100.100").

NOTE:



- Every VISOR® vision sensor in the network has a unique host name that cannot be changed by the user. The host name contains the last 6 hexadecimal values of the MAC address (example: MAC address: 00-19-6F-0D-C8-63 corresponds to visor-0dc863.local).
It is enough to simply enter the URL in the browser: http://visor-0dc863.local.
- 10 browser connections are permitted per VISOR® vision sensor, of which a maximum of one may be in configuration mode. All other browser connections are for monitoring mode only. When operating SensoConfig Web and SensoConfig in parallel, only one of the two tools may be operating in configuration mode at any one time. The other is then blocked.
- The use of SensoConfig Web has an influence on the processing time of the VISOR® vision sensor. Opening multiple connections to SensoConfig Web can slow down the total execution time.

5.2 VISOR® SensoConfig Web functions

5.2.1 Logging in to sensor

NOTE:

As of version 2.12.2.x, the VISOR® vision sensor is delivered with default passwords for **administrators** and **workers**.



The default passwords are:

Administrator: "admin"

Worker: "worker"

Detailed information can be found in the [VISOR® user manual 068-14797](#), chapter "Device password"

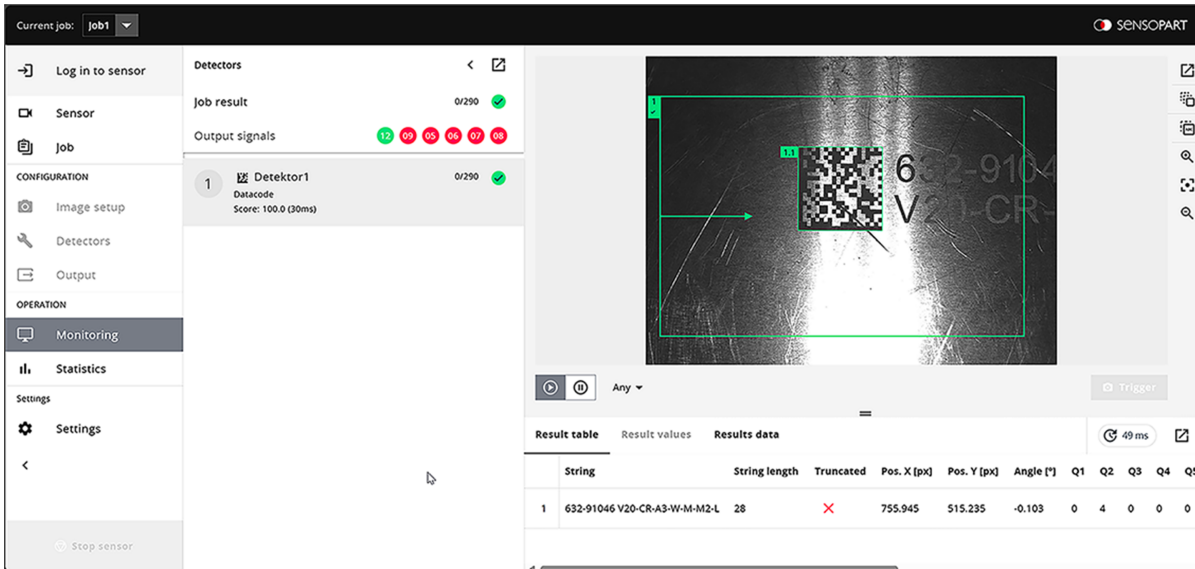


Fig. 3: The VISOR® SensoConfig Web Login view

5.2.2 Sensor

All sensor details of the connected sensor are displayed in this overview.

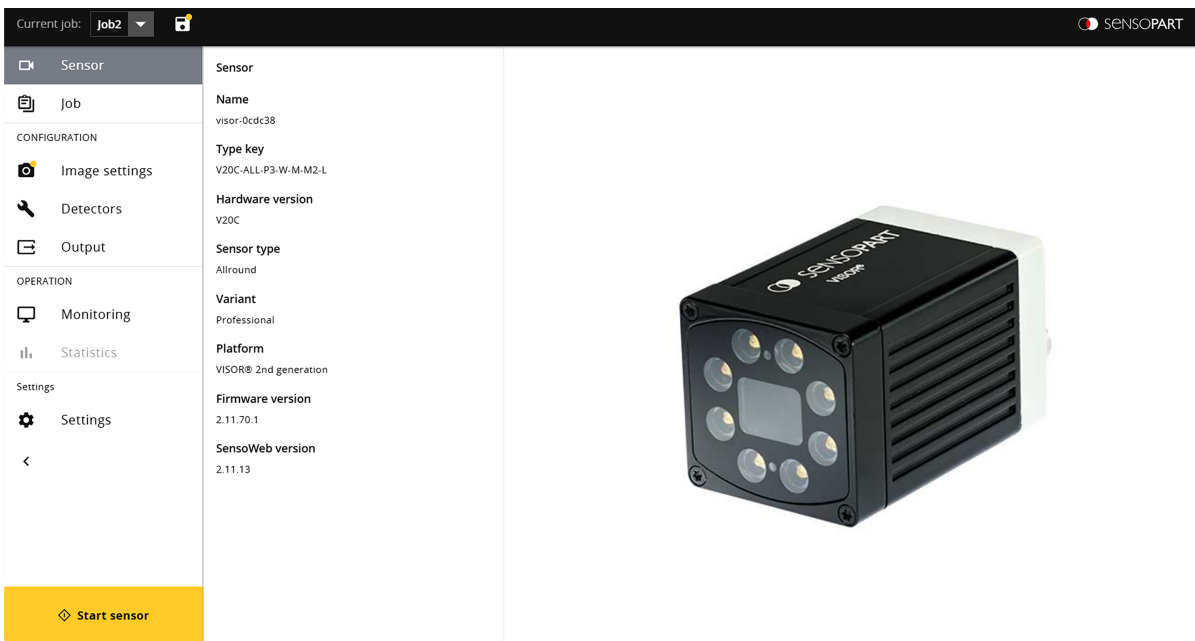


Fig. 4: View VISOR® SensoConfig Web Sensor

5.2.3 Job

All existing jobs are listed in this view. Details are displayed for the active job with the gray background. The author of the job and a description can be added there.

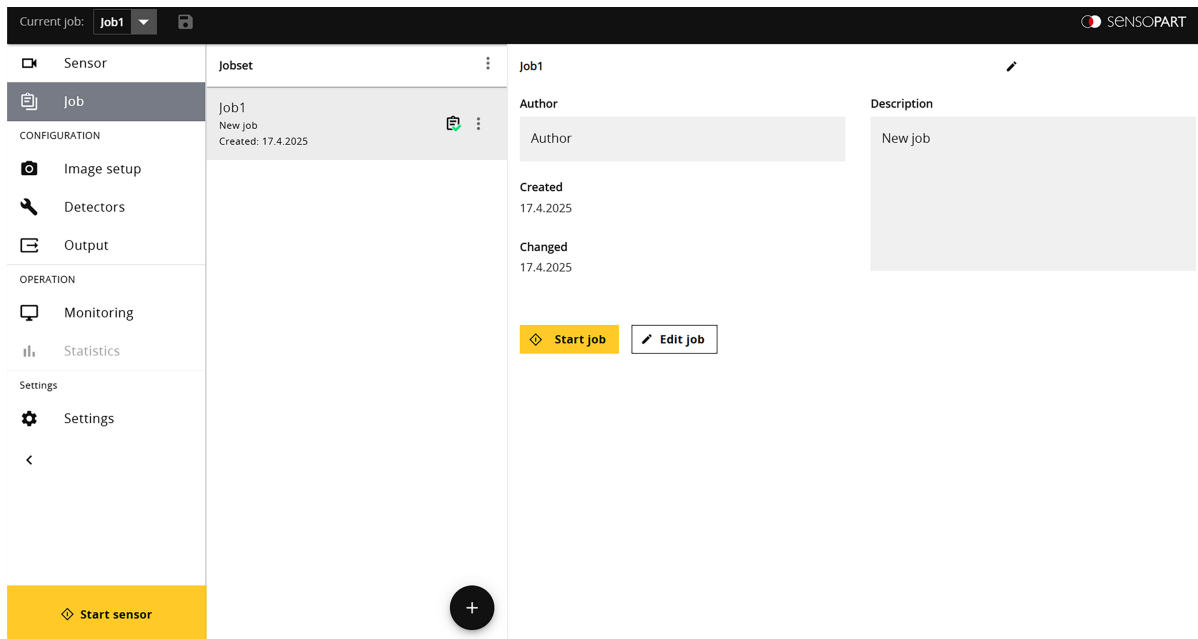


Fig. 5: View VISOR® SensoConfig Web Job

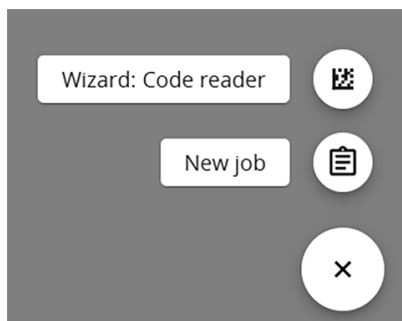


NOTE:


The sensor must be stopped before the sensor can create a new job.

When creating a new job via the "+" symbol, you can choose between using the wizard or setting it up manually.

5.2.3.1 Wizard Code Reader



Use the wizard for guided commissioning. Follow the steps as described.

1. Click on Add job "+" and select "Wizard: Code reader". The sensor starts with automatic image creation.
2. Click on "Search for code". The sensor searches for available codes and displays them.
3. Click on "Show code quality check" and the quality diagram is displayed.
4. Follow the instructions  on the quality parameter and make improvements if necessary.
5. Click on "Optimize image settings", "Create and edit job" or "Create and run job".
 - **Optimize the image settings:** Automatic image creation starts again.
 - **Create and edit a job:** The "Detectors" overview opens.
 - **Create and execute job:** The "Monitoring" overview opens.

5.2.3.2 Manual job creation

1. Click on Add job "+" and select "New job".
2. Assign a name for the new job and click on "Add and edit new job". The job is created and the "Image settings" window opens.

5.2.4 Image settings

Here, the image settings of the connected sensor and the active job can be edited automatically or using the individual parameters.

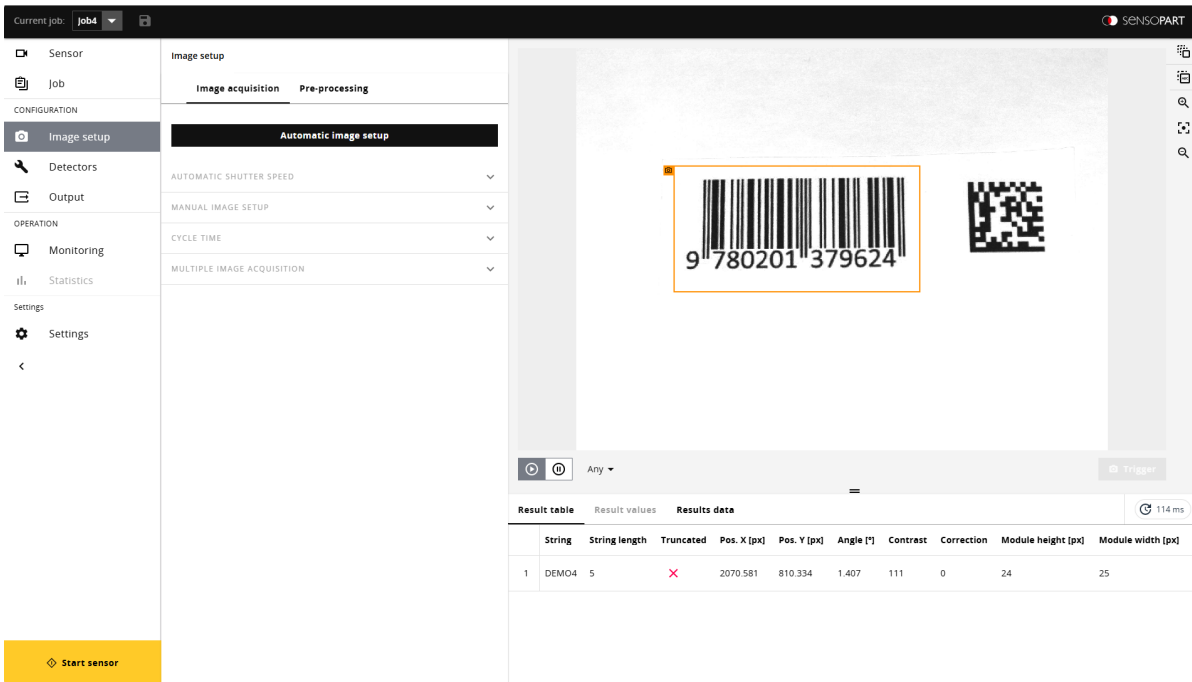


Fig. 6: View VISOR® SensoConfig Web Image settings

5.2.4.1 Image acquisition

Parameter description:

Filter	Setting
Auto shutter speed	<p>Target brightness: The automatic brightness control adjusts the shutter speed and gain so that the average brightness in the orange search region corresponds to the target brightness set here. The value range is [0...255] gray values.</p> <p>Maximum shutter speed: The automatic brightness control adjusts the shutter speed and gain so that the average brightness in the orange search region corresponds to the set target brightness. As this takes place, the maximum shutter speed set here is not exceeded.</p>

Filter	Setting
Manual image settings	<p>Shutter speed: Parameters for controlling the image brightness. Image brightness should preferably be set with the shutter speed. Only in the second step, if necessary, adjust the gain (default gain = 1). With moving objects, a slower shutter speed can cause motion blur in the image. Auto: With the "Auto" button the exposure can be set automatically. The maximum shutter speed that can be configured is 100 ms. The duration of the internal exposure pulse is limited to 8 s. Shutter speeds longer than 8 ms only make sense in cases in which external lighting (or both internal and external lighting) is used.</p> <p>Working distance: Auto: With the button "Auto" the approximate working distance can be set automatically. You can use the slider, or edit the values, to do a fine adjustment.</p> <p>Trigger mode: Selection option that can be used to define whether the vision sensor should be operated in trigger mode or in free run mode.</p> <ul style="list-style-type: none"> • Trigger: In case of triggered mode, trigger can be done by hardware-trigger (Pin 03 WH) or over one of the data interfaces. • Free run: In free-running mode, the VISOR® vision sensor continuously records and evaluates images.
Cycle time	<p>Max. cycle time: Parameter for controlling the execution time of a cycle. Inside a cycle, some images can be evaluated (in case of "Number of images" >1). Maximum execution time is used to abort a cycle after a defined time. The result of the cycle after a timeout is always "not OK". The maximum cycle time should always be greater than the time required for a complete evaluation.</p> <p>Max. processing time per image: Maximum duration of an evaluation within the cycle including image capture.</p> <p>Min. processing time per image: Minimum duration of one evaluation inside cycle including image acquisition. The minimum processing time can be used to suppress multiple triggers. In the case of "Number of images" = 1 (default), the "Min. processing time per image" corresponds to the minimum cycle time.</p>
Multiple image acquisition	<p>Number of images (max.): Maximum number of image acquisition operations that are executed after a trigger.</p>

5.2.4.2 Pre-processing

Parameter description:

Filter	Setting
Gauss	The image is smoothed with a gaussian filter. This can be used to reduce noise, suppress undesirable details and artifacts and smooth edges.

Filter	Setting
Erosion	Extension of dark regions, elimination of bright pixels in dark regions, elimination of artifacts, separation of bright objects. Effect: Each gray value is replaced by the minimum gray value within the filter mask (e.g. 3x3 filter mask).
Dilation	Extension of bright regions, elimination of dark pixels in dark regions, elimination of artifacts, separation of dark objects. Effect: Each gray value is replaced by the maximum gray value within the filter mask (e.g. 3x3 filter mask).
Mean	Each gray value is replaced by the mean value of the pixels found within the filter mask (e.g. 3x3). Typical application: This can be applied for reduction of disturbances, suppression of disturbing details and artifacts and smoothing the image.
Median	Each gray value is replaced by the median value of the pixels found within the filter mask (e.g. 3x3). Typical application: Smoothing the image, suppressing image noise, especially local light or dark regions / pixels (salt and pepper noise)

5.2.5 Detectors

Each job contains one or more detectors. These are displayed here and the individual parameters can be edited.



NOTE:
Currently, only the Datacode and Barcode detectors are available for editing.

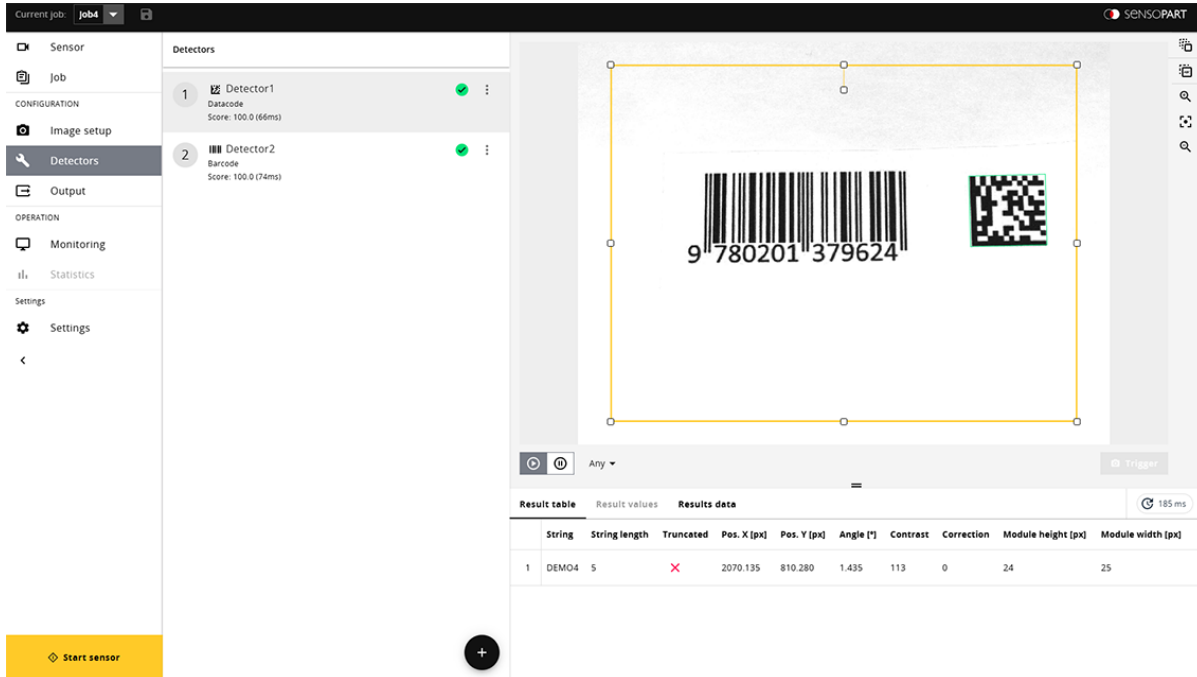


Fig. 7: View VISOR® SensoConfig Web Detectors

Parameter description:

Filter	Setting
Codes	<p>Code type: The code is recognized and assigned to a code type using the "Auto" button.</p> <p>Barcodes:</p> <ul style="list-style-type: none"> • 2/5 Industrial • 2/5 Interleaved • Codabar • Code 39 • Code 93 • GS1-128 • EAN 8 • EAN 8 Add-On 2 • EAN 13 • EAN 13 Add-On 2 • EAN 13 Add-On 5 • UPC A • UPC A Add-On 2 • UPC A Add-On 5 • UPC E • UPC E Add-On 2 • UPC E Add-On 5 • PharmaCode • RSS 14 / GS 1 • RSS 14 Truncated • RSS 14 Stacked • RSS 14 Stacked Omnidir • RSS Limited • RSS Expanded • RSS Expanded Stacked • Code 32 <p>Datacode:</p> <ul style="list-style-type: none"> • ECC 200 • QR Code • PDF 417 • ECC 200 (GS1) • QR Code (GS1) • Micro QR code • Aztec code • Aztec code (GS1) <p>Addition GS1: Check whether the code complies with the GS1 standard. Codes that do not comply with the standard will not be read with this setting.</p> <p>Max. number of codes: Maximum number of codes to be read inside the region of interest. If this value is chosen higher than actually necessary, the execution time of the detector may increase slightly.</p> <p>Text output for incorrect reading: Specifies the text which is output via the interfaces in case of an incorrect reading. The text does not appear in the result display.</p>

Filter	Setting																														
Reference string	<p>Reference string: This text or regular expressions is taken for verification. This is where concrete characters can be found, which are compared directly, or regular expressions to check the structure of the read result.</p> <p>Add expression: Opens a list with examples for regular expressions.</p> <p>Teach-in reference string: Reads the code that is currently under the code reader and accepts the read content as a comparison text. This text can be changed later.</p>																														
Quality	<p>Barcode</p> <p>Quality parameters: Selection of the ISO/IEC 15416 standard for the quality check of the code.</p> <p>Output format: Selection of the output format of the quality parameters:</p> <ul style="list-style-type: none"> • "Numeric" • "Letter" <p>Both formats correspond to the norms. A and 4 are the best possible grades. The setting made here affects both the display of the quality parameters on the screen and the output of the quality parameters via the interfaces. The assignment is the following:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Letter:</td> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">F</td> </tr> <tr> <td>Numeric:</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> </table> <p>Datacode</p> <p>Quality parameters: Selection of the output format of the quality parameters (depending on the selected standard):</p> <ul style="list-style-type: none"> • "Numeric" • "Letter" • "Numeric decimal" <p>The formats "Numeric" and "Letter" correspond to the standards, "Numeric decimal" is an additional output format beyond the standard. A and 4 are the best possible grades. The setting made here affects both the display of the quality parameters on the screen and the output of the quality parameters via the interfaces.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Letter:</td> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">F</td> </tr> <tr> <td>Numeric:</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Numeric decimal:</td> <td style="text-align: center;">≥ 3.5</td> <td style="text-align: center;">2.5...3.4</td> <td style="text-align: center;">1.5...2.4</td> <td style="text-align: center;">0.5...1.4</td> <td style="text-align: center;">≤ 0.4</td> </tr> </table>	Letter:	A	B	C	D	F	Numeric:	4	3	2	1	0	Letter:	A	B	C	D	F	Numeric:	4	3	2	1	0	Numeric decimal:	≥ 3.5	2.5...3.4	1.5...2.4	0.5...1.4	≤ 0.4
Letter:	A	B	C	D	F																										
Numeric:	4	3	2	1	0																										
Letter:	A	B	C	D	F																										
Numeric:	4	3	2	1	0																										
Numeric decimal:	≥ 3.5	2.5...3.4	1.5...2.4	0.5...1.4	≤ 0.4																										

Barcode quality parameters

The quality parameters are made up of individual assessments, the meaning of which can be found in the respective standards.

Standard 1D barcodes – Parameter description:

Parameter	Function
Q1 Overall Quality	Average of the minimum values of the following quality parameters. The minimum value of a quality parameter results from the worst value of the 10 scan lines.
Q2 Not used	-
Q3 Not used	-
Q4 Decode	Set to 4 if the analyzed barcode symbol could be read, otherwise set to 0.
Q5 Symbol Contrast	Difference between maximum and minimum reflectance value of the gray value profile; higher contrast results in a better grade.
Q6 Minimal Reflectance	Set to 4 if the minimum reflectance value of the gray value profile is less than or equal to 0.5 of the maximum reflectance value. Otherwise a value of 0 is assigned.
Q7 Minimal edge contrast	Evaluates the minimal edge contrast in the gray value profile. The edge contrast is the contrast between two neighboring symbol elements (both line-to-hole or hole-to-line).
Q8 Modulation	Evaluates the amplitude between the symbol elements. Higher amplitudes mean that lines and holes can be distinguished more reliably from each other and this grade is rated higher.
Q9 Defects	Irregularities in the gray value profile within individual symbol elements or the quiet zones, the presence of which is marked with a lower grade.
Q10 Decodability	Denotes deviations of the symbol element widths from their nominal value, which is defined in the corresponding symbology standard.
Q11 Additional Requirements	Other symbology specific requirements such as: quiet zone widths, wide/narrow ratio, inter character gaps, guarding patterns or others.

Composite and stacked barcodes – Parameter description:

The print quality assessment of a "composite" barcode comprises the following 24 grades.

Parameter	Function
Q1 Overall Quality	Minimum value of all remaining grade values.
Q2 Overall Linear	Minimum value of the Q parameters Q4-Q11; represents the total grade of the linear (1D) component of the composite symbol.
Q3 Overall Composite	Minimum value of the Q parameters Q12-Q24; represents the total grade of the composite (2D) part of the composite symbol.
LINEAR: Q4 Decode Q5 Symbol Contrast Q6 Minimal Reflectance Q7 Minimal edge contrast Q8 Modulation Q9 Defects Q10 Decodability Q11 Additional Requirements	The grades from the LINEAR group correspond to those from the simple 1D barcode case described above.
COMPOSITE: Q12 Decode Q13 Rap Overall	The grades from the COMPOSITE group correspond to the PDF417 quality grades, whereby Rap Overall is named after the so-called RAP start-stop pattern, which is specific to composite symbols.

Parameter	Function
COMPOSITE RAP: Q14 Contrast Q15 Minimal Reflectance Q16 Minimal Edge Contrast Q17 Modulation Q18 Defects Q19 Decodability Q20 Codeword Yield Q21 Unused Error Correction Q22 Modulation Q23 Decodability Q24 Defects	In addition, the COMPOSITE RAP subgroup represents the individual gray value profile grades of the RAP pattern. These grades correspond to the simple 1D barcode quality grades.

Datacode quality parameters

Quality parameters are provided as additional information for evaluating the quality of the codes.

For a standard-compliant quality assessment, certain minimum requirements are specified for the imaging of the code in the camera (resolution), the arrangement of the camera and the type and arrangement of the illumination. These are printed in the respective standards.

The quality parameters are made up of individual assessments, the meaning of which can be found in the respective standards.

Overview quality parameters

ISO/IEC 15415		
ECC200 Atzec	QR Code MicroQR	PDF417
Q1 Overall Quality	Q1 Overall Quality	Q1 Overall Quality
Q2 Contrast	Q2 Contrast	Q2 Start / Stop Pattern
Q3 Modulation	Q3 Modulation	Q3 Codeword Yield
Q4 Fixed Pattern Damage	Q4 Fixed Pattern Damage	Q4 Unused Error Correction
Q5 Decode	Q5 Decode	Q5 Modulation
Q6 Axial Nonuniformity	Q6 Axial Nonuniformity	Q6 Decodability
Q7 Grid Nonuniformity	Q7 Grid Nonuniformity	Q7 Defects
Q8 Unused Error Correction	Q8 Unused Error Correction	Q8 Aperture
Q9 Reflectance Margin	Q9 Reflectance Margin	
Q10 Print Growth	Q10 Print Growth	
Q11 Contrast Uniformity	Q11 Contrast Uniformity	
Q12 Aperture	Q12 Format Information	
	Q13 Version Information	
	Q14 Aperture	
Legends for region:		
0-4, A-F		
0.0-1.0*100	0 is the best value	
0.0-1.0*100	100 is the best value	
float		

AIM DPM 2006		Semi T10
ISO/IEC TR 29158		
ECC200 Atzec	QR Code MicroQR	ECC200
Q1 Overall Quality	Q1 Overall Quality	P1 Row
Q2 Cell Contrast	Q2 Cell Contrast	P1 Column
Q3 Cell Modulation	Q3 Cell Modulation	P2 Row
Q4 Fixed Pattern Damage	Q4 Fixed Pattern Damage	P2 Column
Q5 Decode	Q5 Decode	P3 Row
Q6 Axial Nonuniformity	Q6 Axial Nonuniformity	P3 Column
Q7 Grid Nonuniformity	Q7 Grid Nonuniformity	P4 Row
Q8 Unused Error Correction	Q8 Unused Error Correction	P4 Column
Q9 Mean Light	Q9 Mean Light	Rows
Q10 Reflectance Margin	Q10 Reflectance Margin	Columns
Q11 Print Growth	Q11 Print Growth	Symbol Contrast
Q12 Contrast Uniformity	Q12 Contrast Uniformity	Symbol Contrast SNR
Q13 Aperture	Q13 Format Information	Horizontal Mark Growth
	Q14 Version Information	Vertical Mark Growth
	Q15 Aperture	Data Matrix Cell Width
		Data Matrix Cell Height
		Horizontal Mark Misplacement
		Vertical Mark Misplacement
		Cell Defects
		Finder Pattern Defects
		Unused Error Correction
Legends for region:		
0-4, A-F		
0.0-1.0*100	0 is the best value	
0.0-1.0*100	100 is the best value	
float		

5.2.6 Output

Displays the output of the active job.

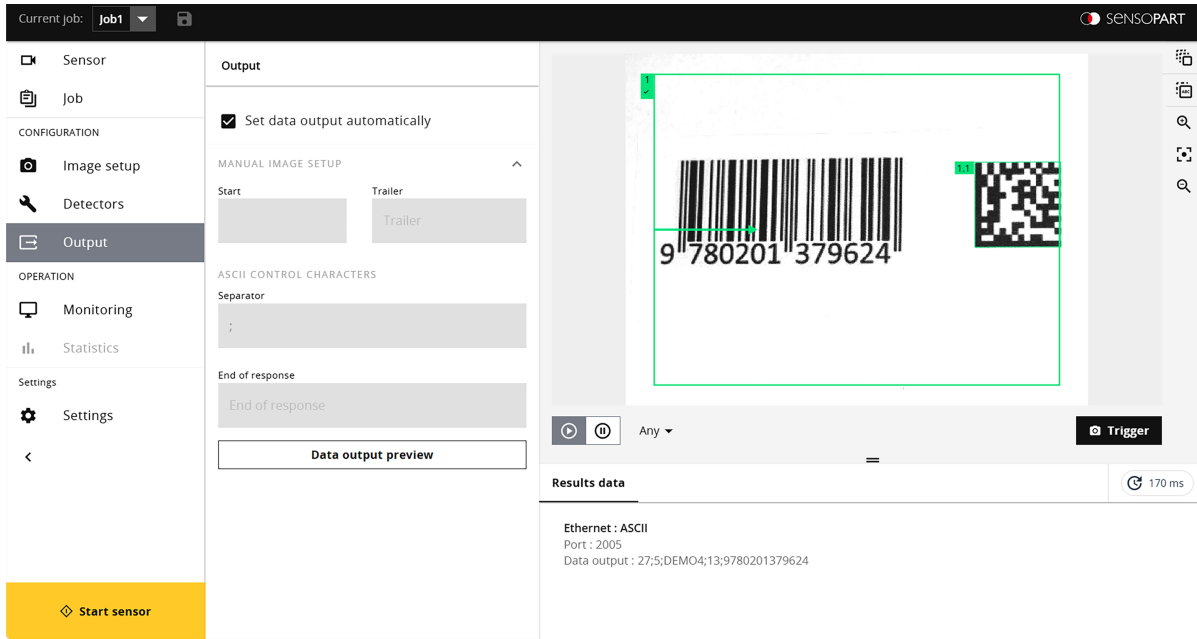


Fig. 8: View VISOR® SensoConfig Web Output



NOTE:

"Set data output automatically" is selected by default.
 If deactivated, the data can be edited in the SensoConfig PC version.

5.2.7 Monitoring

Display image and result data for the active job.

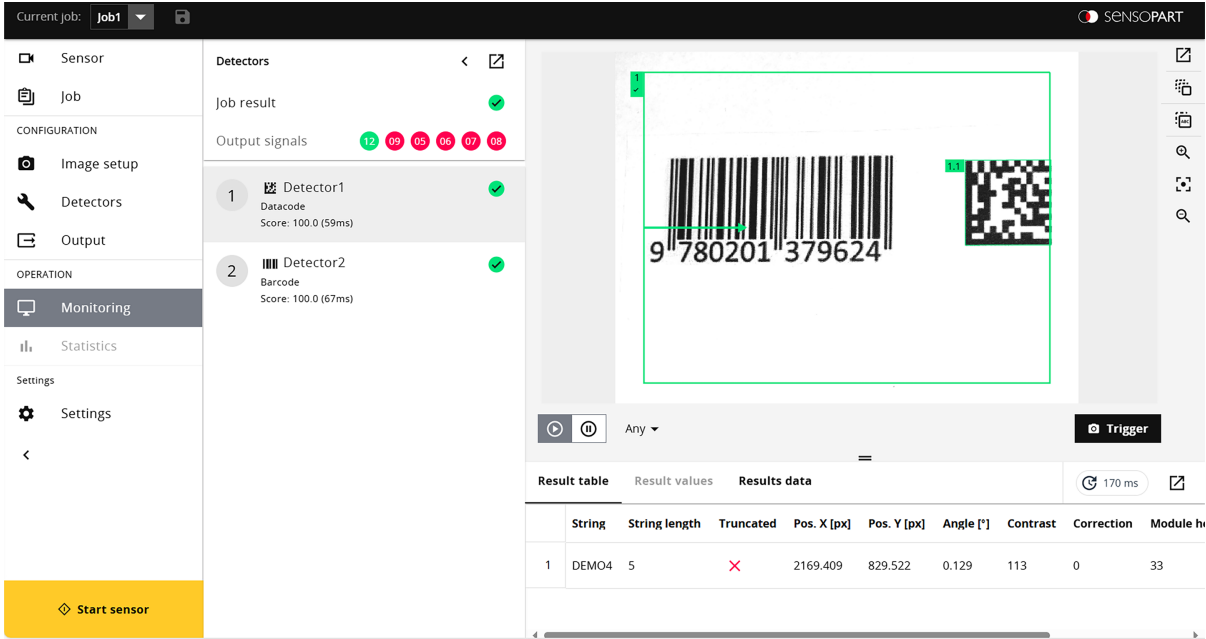


Fig. 9: View VISOR® SensoConfig Web Monitoring

Depending on the detector selected, tabular or individual results are output. If a detector delivers both types of results, you can switch between the "Results table" and "Result values" tabs.

5.2.8 Statistic

Detailed statistics on individual detectors of the active job, such as overview of evaluations, PASS and FAIL object parts, as well as cycle and execution times.

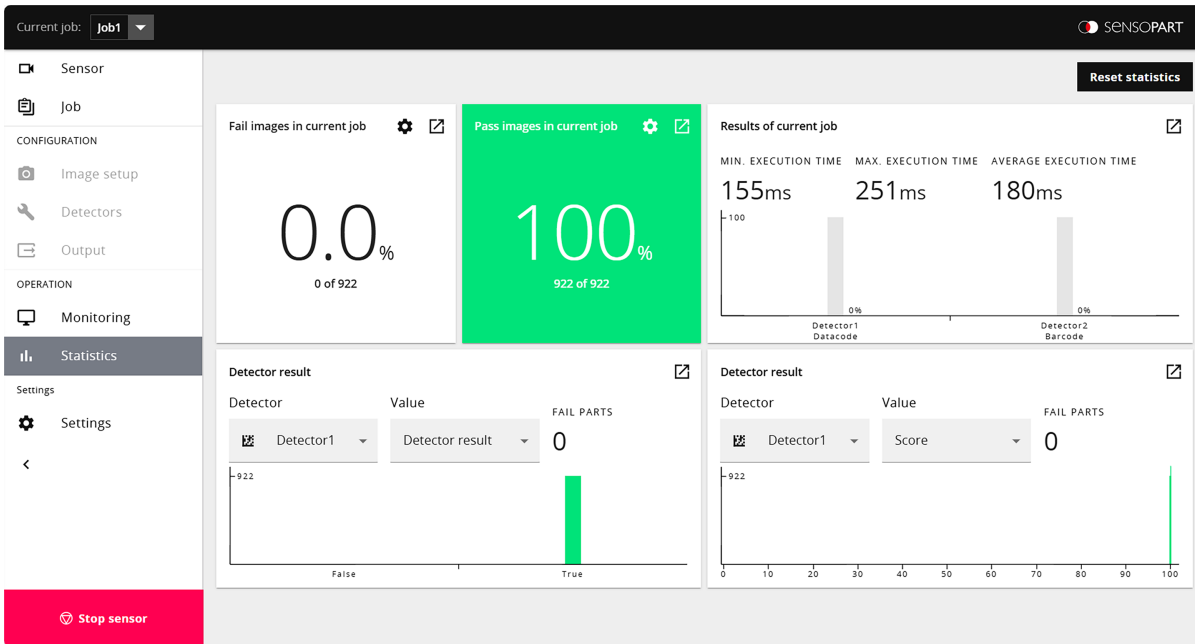


Fig. 10: View VISOR® SensoConfig Web Statistics



NOTE:

The result and score are displayed by default under "Detector result". If further individual values are to be displayed, these must first be selected under Output / Telegram / Payload.

5.2.9 Settings

The device and software settings are made here.

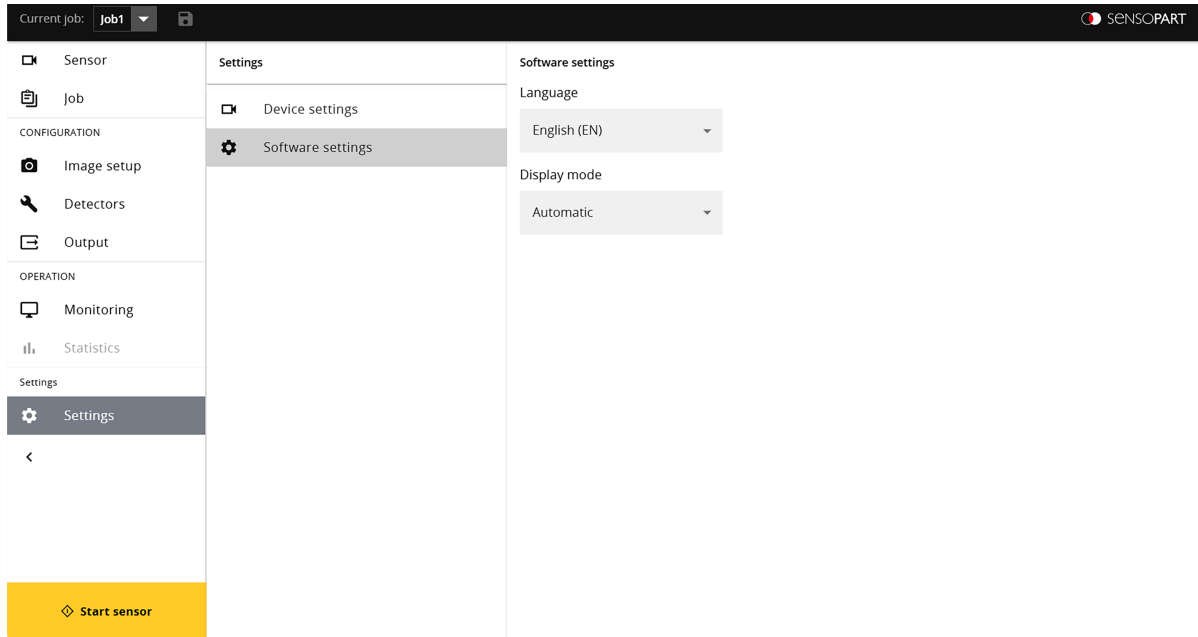


Fig. 11: View VISOR® SensoConfig Web Settings

5.2.9.1 Device settings

Network tab

The network settings, such as IP address, subnet mask, gateway or MAC address, of the selected sensor are displayed in this tab.

Tab Interfaces

In this tab, you select and activate the used digital inputs / outputs and the interfaces for data output. You can also select the format in which the data is to be output.

5.2.9.2 Software settings

The language and display mode settings can be set in this tab.

5.3 Updates

Software updates for SensoConfig Web are carried out via the SensoFind PC software.

5.4 URLs in SensoConfig Web

In VISOR® SensoConfig Web it is possible to compile the individual displays (e.g. Monitoring or Statistic) modularly via URL in separate windows.

The corresponding URL can now be saved as a favorite, for example, and the window can thus be called up directly.

Example: `http://192.168.100.100/monitor/image/live-any/overlay-all/1/errorhighlight`

In addition, `http://192.168.100.100/zoom.html` (or, alternatively, the IP address of the sensor) can be used to open the enlarged view directly.

Handling of invalid URLs

Usecase	Device mode	Default URL
An invalid URL entered in configuration mode redirects the application to the Sensor page.	Configuration mode	<code>http://[device-IP]/sensor</code>
An invalid URL entered in Run mode redirects the application to the Monitoring page.	Run mode	<code>http://[device-IP]/monitor</code>

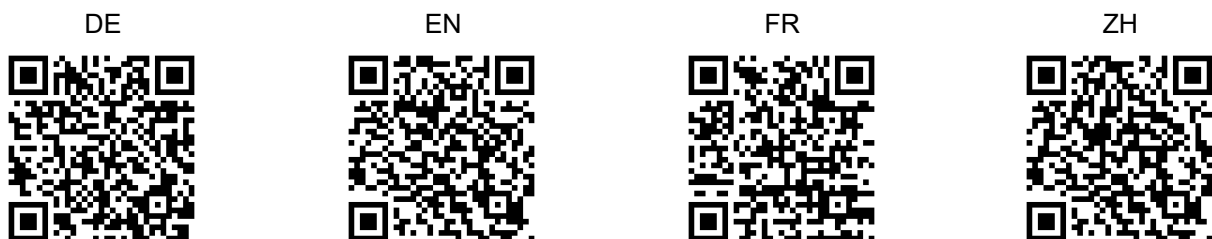
5.5 VISOR® SensoFind App

The VISOR® SensoFind App provides an overview of all available VISOR® vision sensors. The app can be used to make IP settings and to access VISOR® SensoConfig Web.

You can find the VISOR® SensoFind App on our website:

- www.sensopart.com/de/sensofind/
- www.sensopart.com/en/sensofind/
- www.sensopart.com/fr/sensofind/
- www.sensopart.com/zh/sensofind/

Alternatively, VISOR® SensoFind App can also be found using the following QR codes:



Copyright

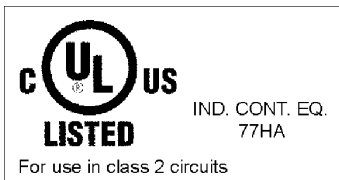
Any reproduction or reprinting of this document, as well as any corresponding storage in databases or retrieval systems, or the publication, in any form whatsoever, even in part, or any imitation of the illustrations, drawings and design is permitted only on the basis of prior written authorization from SensoPart Industriesensorik GmbH.

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- Translation of Original operating instructions -

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For use in NFPA 79 Applications only



Open Source Licences

The VISOR® Vision software makes use of third party software packages that come under various licenses.

Please find the licenses, copyright statements and acknowledgements of open-source software of the PC software installation and the device firmware at "C:\Program Files\SensoPart\VISOR Vision Sensor\Eula\OpenSourceLicenses".

For at least three years from the date of distribution of the applicable product or software, we may hand out a complete machine-readable copy of the corresponding open-source code for the version that we may have distributed. For this service, please contact us using the contact information provided below. The data is provided for a charge of no more than the cost of physical distribution.

The licenses may also be retrieved from the VISOR® device by following method:

1. Open a TCP connection to the device on port 2003.
2. Send following binary data: "h00 h00 h00 h06 h01 h37".
3. Connect with a SFTP-Client to "sftp://user@192.168.100.100/tmp". (credentials: user, password: user).
4. Download the file license.tar.gz.

The packages containing the source code and licenses for all open-source software are available upon request to: Open.Source@sensopart.de

We look ahead
Yesterday, today and in the future



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