

# DNNF012

# DNNF020

uniVision software



Change Index Software

# Compatibility

The following uniVision products each have their own version number:

- uniVision software
- weQube firmware
- Control unit firmware
- weCat3D firmware (in operating mode “Smart weCat3D”)
- uniVision projects

The version numbers of software and firmware products consist of three digits (e.g. Software\_uniVision\_2.3.0):

- Major release: The first digit is changed (no project compatibility)
- Feature release: The second digit is changed (projects must be converted)
- Bugfix release: The third digit is changed (projects are compatible)

The following generally applies with regard to the compatibility of uniVision project files:

- For uniVision projects, there are only two digits in the version number, as the project format does not change for bug fixes (third digit changed).
- Projects with a specific two-digit version number can only be opened on devices with a suitable version of the firmware or set up using a suitable version of the software.
- After a firmware update with new features (second digit changed) on a device (e.g. Smart Camera), the corresponding software version must be installed and existing projects must be converted. Details can be found in the operating instructions for the uniVision software.

## NOTE!

- Starting with version 2.3.0, uniVision software for Windows no longer includes older software versions for setting up uniVision devices or projects with older versions.
- To set up uniVision devices or projects with older versions, the appropriate version of uniVision software for Windows must be installed (e.g. uniVision 2.2.5, 2.1.4 or 2.0.6 software). These versions can also be installed in parallel.
- All other versions prior to 2.3.0 also contain older software versions in the installation package, which therefore cannot be installed in parallel to 2.2.4, 2.2.5, 2.1.3, 2.1.4, 2.0.5 or 2.0.6!





The following table shows which versions are compatible with each other.

uniVision Software	weQube firmware	Control unit firmware	weCat3D firmware (operating mode “Smart weCat3D”)	Project version
Not available	Not available	1.0.x	Not available	2.0
Not available	Not available	1.1.x	Not available	2.1
2.0.5	2.0.x	2.0.x	Not available	2.2
2.1.3	2.1.x	2.1.x	Not available	2.3
2.2.4	2.2.x	2.2.x	Not available	2.4
2.3.x	2.3.x	2.3.x	Not available	2.5
2.4.x	2.4.x	2.4.x	2.0.x	2.6
2.5.x	2.5.x	2.5.x	2.1.x and 2.2.x	2.7
2.6.x	2.6.x	2.6.x	2.3.x	2.8

## Change Index Software

Version	Release Date	Description/change	Compatibility
2.6.3	30.04.2026	<p>New firmware version 2.6.3 for the Control Unit BB1C including the following fix: Restoring general data after power loss.</p> <p>New firmware version 2.6.3 for the weQube including the following fixes:</p> <ul style="list-style-type: none"> <li>• Keep licenses when loading configuration from SD card via display function</li> <li>• Minor fix of Autofokus</li> </ul>	<p>Projects: 2.8</p> <p>2D/3D profile sensor firmware: 2.4.0</p> <p>Digital camera firmware BB6K: 2.7.10674</p> <p>Digital camera firmware BBZK001-004: 3.4.54</p> <p>Digital camera firmware BBZK005: 4.0.5</p> <p>Digital camera firmware BBZK006: 4.0.4</p> <p>Control unit firmware: 2.6.3</p> <p>weQube firmware: 2.6.3</p> <p>Plugin VisionApp 360: 1.4.4</p> <p>Plugin Robot Weld Seam Tracking Interface 1.0.8</p> <p>Plugin Kuka Interface: 2.0.3</p>

Version	Release Date	Description/change	Compatibility
2.6.2	07.10.2025	<p>New firmware version 2.6.2 for the Control Unit BB1C including the following fixes:</p> <ul style="list-style-type: none"> <li>• Deactivate logging in order to avoid high number of write cycles on the SSD (especially relevant for the Control Units BB1C5)</li> <li>• Avoid sporadic 70031 module state errors if using the Machine Vision Camera BBZK</li> </ul> <p style="text-align: center;"><b>NOTE!</b></p> <p>The high number of write cycles in all previous versions can result in rare cases in broken SSDs requiring to exchange the SSD so that the Control Unit BB1C boots and works again. Consequently, the update to this minimum firmware version is highly recommended for long-term stability.</p> 	<p>Projects: 2.8  2D/3D profile sensor firmware: 2.4.0  Digital camera firmware BB6K: 2.7.10674  Digital camera firmware BBZK001-004: 3.4.54  Digital camera firmware BBZK005: 4.0.5  Digital camera firmware BBZK006: 4.0.4  Control unit firmware: 2.6.2  weQube firmware: 2.6.1  Plugin VisionApp 360: 1.4.4  Plugin Robot Weld Seam Tracking Interface 1.0.8  Plugin Kuka Interface: 2.0.3</p>

Version	Release Date	Description/change	Compatibility
2.6.1	07.06.2023	<p><b>Changes:</b></p> <ul style="list-style-type: none"> <li>• Support of Control Units BB1C4xx and BB1C5xx</li> <li>• Renaming of „uniVision“ to „wenglor uniVision 2“</li> </ul> <p><b>NOTE!</b></p> <p> Before the installation of the software uniVision for Windows 2.6.1 it is recommended to deinstall the software uniVision for Windows 2.6.0.</p>	<p>Projects: 2.8  2D/3D profile sensor firmware: 2.3.0  Digital camera firmware BB6K: 2.7.10674  Digital camera firmware BBZK001-004: 3.4.54  Digital camera firmware BBZK005: 4.0.5  Digital camera firmware BBZK006: 4.0.4  Control unit firmware: 2.6.1  weQube firmware: 2.6.1  Plugin VisionApp 360: 1.4.3  Plugin Fanuc Interfaces: 2.1.1  Plugin Kuka Interface: 2.0.3  Plugin ABB Interface: 2.1.2  Plugin Yaskawa nterface: 2.0.3</p>

Version	Release Date	Description/change	Compatibility
2.6.0	09.09.2022	<p><b>New features:</b></p> <p>uniVision for Vision Systems:</p> <ul style="list-style-type: none"> <li>• New cameras BBZK are supported.</li> <li>• The module specific tool for Device digital-camera to adjust focus and iris was removed. Alternatively, the run mode of the software uniVision can be used.</li> </ul> <p>uniVision for Control Units with 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• New operating mode „GigE Vision“: 2D/3D Profile Sensors in operating mode „GigE Vision“ are not found in the widget „Add devices to Control Unit“. For this use case, use the operating mode „Profile Generator“.</li> </ul> <p>uniVision for smart 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• New operating mode „GigE Vision“: 2D/3D Profile Sensors in operating mode „GigE Vision“ are not found in the „Device Network Search“. In order to find smart 2D/3D Profile Sensors, use the operating mode „Smart weCat3D“.</li> </ul> <p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• Update of the software license manifest.</li> <li>• Control Units with 2D/3D Profile Sensors: At the pixel format Mono 16, correct intensity values of the measurement points are now sent.</li> <li>• Module Code 1D/2D: Change of specific extended parameters is now possible.</li> </ul>	<p>Projects: 2.8</p> <p>2D/3D profile sensor firmware: 2.3.0</p> <p>Digital camera firmware BB6K: 2.7.10674</p> <p>Digital camera firmware BBZK001-004: 3.4.54</p> <p>Digital camera firmware BBZK005: 4.0.5</p> <p>Digital camera firmware BBZK006: 4.0.4</p> <p>Control Unit firmware: 2.6.0</p> <p>weQube firmware: 2.6.0</p> <p>Plugin VisionApp 360: 1.4.2</p> <p>Plugin Fanuc Interfaces: 2.1.0</p> <p>Plugin Kuka Interface: 2.0.2</p> <p>Plugin ABB Interface: 2.1.1</p> <p>Plugin Yaskawa Interface: 2.0.2</p>


Version	Release Date	Description/change	Compatibility
2.5.1	24.06.2022	<p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• Smart weCat3D: After activating license files, it is ensured that license files are not getting corrupt after the next sensor power off.</li> <li>• Control Unit with 2D/3D Profile Sensors: Sporadic not successful set of sensor parameters after reboot and project load is prevented.</li> <li>• Control Unit with 2D/3D Profile Sensors: Regular short interrupts at profile transfer and result output are prevented.</li> <li>• Control Unit: Command Ready signal is only activated when the project change via Industrial Ethernet is finished completely.</li> <li>• Control Unit: During project change via Industrial Ethernet, Operation Ready signal is inactive like described in the manual.</li> <li>• Module Threshold HSV: Sporadic wrong initialization of values at regular project changes is prevented.</li> <li>• Module Pointcloud Measure: Midpoints of found line segments are now calculated correct even with linked input coordinate system.</li> <li>• Module Spreadsheet: Small bugfixes (relevant at parameterization).</li> <li>• Smart Camera weQube: At project change via digital IOs, the output pulse sequence is now sent correct (without additional peak at the beginning).</li> <li>• Visualization: The label texts e.g. of values can now also remain empty.</li> <li>• Visualization: Overlays in images (e.g. rectangles) are now shown correct after booting or project change.</li> <li>• Software uniVision for Windows runs now again on PCs with Windows 7, 64 bit.</li> <li>• Small bugfixes at the project conversion</li> <li>• Update of the software license manifest</li> </ul>	<p>Projects: 2.7  2D/3D profile sensor firmware: 2.2.0  Digital camera firmware: 2.7.10674  Control Unit firmware: 2.5.1  weQube firmware 2.5.1  Plugin VisionApp 360: 1.4.2  Plugin Fanuc Interfaces: 2.1.0  Plugin Kuka Interface: 2.0.2  Plugin ABB Interface: 2.1.1  Plugin Yaskawa Interface: 2.0.2</p>


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2.5.0	25.02.2022	<p><b>New features:</b></p> <p>uniVision for smart 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• New 2D/3D Profile Sensors MLZL and M2SL are supported.</li> <li>• New Module Pointcloud Seam Tracking</li> <li>• Extension of templates</li> </ul> <p>uniVision for Control Units with 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• New 2D/3D Profile Sensors MLZL and M2SL are supported.</li> <li>• New versions of the robot plugins are supported.</li> <li>• New Module Pointcloud Seam Tracking</li> <li>• Extension of templates</li> <li>• Plugin VisionApp 360 V1.4.1 is supported.</li> </ul> <p>Software uniVision for Windows:</p> <ul style="list-style-type: none"> <li>• Switch to Windows 7 and 10, 64 Bit</li> </ul> <p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• Webvisu: Overlay type "Image" is shown correct also for reduced readout areas.</li> <li>• Device TCP: Blocking of the Application is prevented when external TCP/IP servers for receiving process data via Device TCP (e.g. Free IP Tools) are crashing.</li> </ul>	<p>Projects: 2.7</p> <p>2D/3D profile sensor firmware: 2.1.0</p> <p>Digital camera firmware: 2.7.10674</p> <p>Control Unit firmware: 2.5.0</p> <p>weQube firmware 2.5.0</p> <p>Plugin VisionApp 360: 1.4.1</p> <p>Plugin Fanuc Interfaces: 2.1.0</p> <p>Plugin Kuka Interface: 2.0.2</p> <p>Plugin ABB Interface: 2.1.1</p> <p>Plugin Yaskawa Interface: 2.0.2</p>
2.4.2	10.01.2022	<p><b>Bugfixes and performance optimizations:</b></p> <ul style="list-style-type: none"> <li>• Smart Camera weQube: Very sporadic license loss is prevented now.</li> <li>• Smart Camera weQube: EtherNet/IP communication with slot 1 for project change is fixed.</li> <li>• Firmware Control Unit: Communication to 2D/3D Profile Sensors is optimized.</li> </ul>	<p>Projects: 2.6</p> <p>2D/3D profile sensor firmware: 2.0.1</p> <p>Digital camera firmware: 2.7.10674</p> <p>Control unit firmware: 2.4.2</p> <p>weQube firmware: 2.4.2</p> <p>Plugin VisionApp 360: 1.3.1</p>

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2.4.1	15.11.2021	<p><b>Bugfixes and performance optimizations:</b></p> <ul style="list-style-type: none"> <li>• VisionSystem2D: Performance optimization when editing uniVision project parameters that are not related to features of the digital cameras</li> <li>• 2D/3D Profile Sensors with article number ML2SL2 are now supported again</li> <li>• Smart weCat3D: Performance optimization when changing values of digital outputs</li> <li>• Smart weCat3D: Initialized behavior for digital IOs after booting</li> <li>• Device FTP: Fixed sporadic stop of data storing at Smart Camera weQube</li> <li>• Teach+ recording at Smart Camera weQube works now again in trigger mode „Continuous“</li> <li>• Device List: Correct update of relation between Control Unit and connected devices after renamings</li> <li>• Visualization: Correct orientation of overlay type bounding box</li> <li>• Visualization: Show several static images</li> </ul>	<p>Projects: 2.6 2D/3D profile sensor firmware: 2.0.1 Digital camera firmware: 2.7.10674 Control unit firmware: 2.4.1 weQube firmware: 2.4.1 Plugin VisionApp 360: 1.3.1</p>
2.4.0	28.06.2021	<p><b>New features:</b></p> <p>uniVision for Smart Cameras:</p> <ul style="list-style-type: none"> <li>• New features at webbased visualization: <ul style="list-style-type: none"> <li>– New overlays (Rectangle, box, polygon, image)</li> <li>– Add texts to overlays</li> <li>– Add static images and OK/NOK images</li> </ul> </li> </ul> <p>uniVision for Vision Systems:</p> <ul style="list-style-type: none"> <li>• New firmware version 2.7.10538 for all models of the Digital Cameras: <ul style="list-style-type: none"> <li>– Rotate image</li> <li>– Filter at trigger input</li> <li>– Acquisition Frame Rate Target</li> <li>– Binning</li> </ul> </li> <li>• New 12 MP Digital Cameras (BB6K005, BB6K006) are supported</li> <li>• Device IO Unit at Control Unit: Output hold time for digital outputs</li> <li>• New features at webbased visualization: <ul style="list-style-type: none"> <li>– New overlays (Rectangle, box, polygon, image)</li> <li>– Add texts to overlays</li> <li>– Add static images and OK/NOK images</li> </ul> </li> <li>• Module Localizer: Performance optimizations</li> </ul> <p>...</p>	<p>Projects: 2.6 2D/3D profile sensor firmware: 2.0.0 Digital camera firmware: 2.7.10538 Control unit firmware: 2.4.0 weQube firmware: 2.4.0 Plugin VisionApp 360: 1.3.1</p>


Version	Release Date	Description/change	Compatibility
		<p>uniVision for smart 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• New operating mode „Smart weCat3D“ is supported</li> </ul> <p>uniVision for Control Units with 2D/3D Profile Sensors:</p> <ul style="list-style-type: none"> <li>• Device IO Unit at Control Unit: Output hold time for digital outputs</li> <li>• New features at webbased visualization: <ul style="list-style-type: none"> <li>– New overlays (Polygon, area)</li> <li>– Add texts to overlays</li> <li>– Add static images and OK/NOK images</li> </ul> </li> </ul> <p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• Correct display of Software uniVision for Windows at monitors with high resolutions</li> <li>• Correct behavior of uniVision Applications at stopped mode (via Acquisition Stop Signal)</li> <li>• Renaming of Control Units, uniVision Applications, Digital Cameras and 2D/3D Profile Sensors works now correct</li> <li>• Module Threshold: Fix at swapped minimum and maximum threshold values when linking input regions</li> <li>• Module Spreadsheet: Small fix when linking exported cells in other modules</li> <li>• Project change via digital inputs at Smart Camera weQube: Input sequence without corresponding uniVision project file keeps the old project active. The device is then still ready to receive new input sequences.</li> <li>• Device TCP: Correct check for maximum number of connections</li> <li>• Visualization: Correct display of measuring fields when using the plugin VisionApp 360</li> </ul>	
2.3.3	01.03.2021	<p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• VisionSystem2D: Fixed timeout issues at image-based Module Pattern Match on the Control Unit</li> <li>• Visualization: Show OK/NOK result again as green/red LED</li> </ul>	<p>Projects: 2.5  2D/3D profile sensor firmware: 1.2.2  Digital camera firmware: 2.0.4171  Control unit firmware: 2.3.3  weQube firmware: 2.3.3  Plugin VisionApp 360: 1.3.0</p>


Version	Release Date	Description/change	Compatibility
2.3.2	22.01.2021	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• Device Industrial Ethernet and Device IO Unit at the Control Unit: Correct reset of toggle bit after project changes</li> <li>• Module Spreadsheet: Bugfix at formula „left/right“</li> <li>• Correct display of Software uniVision for Linux at monitors which are connected to the Control Unit</li> <li>• Software uniVision: Correct display of the tools „Profile“ and „Histogram“</li> <li>• Module Pointcloud Measure: Moving of search lines works now correct</li> <li>• Webbased visualization: Optimizations and bugfixes especially after project changes and after restarts in triggered mode</li> </ul>	Projects: 2.5 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.3.2 weQube firmware: 2.3.2 Plugin VisionApp 360: 1.3.0
2.3.1	14.12.2020	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• Bugfixes and further stability improvements for website and webbased visualization</li> <li>• Switch to browser “Chrome” on Control Unit because of stability reasons</li> <li>• Updated message in case of incompatible projects or connections to devices with incompatible firmware versions</li> <li>• Control Unit with EtherNet/IP: Installation of any configuration file now resets the network settings correctly to default</li> <li>• Improvements at Device FTP: File size of images</li> <li>• Module Pointcloud Measure with tool “Find Segments on Arc”: Minor fixes at the orientation of found arc</li> <li>• Converted projects with special characters (e.g. “ä”) can now be opened on the Control Unit again</li> </ul>	Compatability: Projects: 2.5 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.3.1 weQube firmware: 2.3.1 Plugin VisionApp 360: 1.3.0

Version	Release Date	Description/change	Compatibility
2.3.0	15.11.2020	<p><b>New functions:</b> uniVision software: uniVision software for Windows no longer includes older software versions in the installation package for setting up uniVision devices or projects with older versions.</p> <p style="text-align: center;"><b>NOTE!</b></p> <p style="text-align: center;"> To set up uniVision devices or projects with older versions, the appropriate version of uni-Vision software for Windows must be installed (uniVision 2.2.4, 2.1.3 or 2.0.5 software). These versions can also be installed in parallel.</p> <p>uniVision for Smart Cameras:</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device now also supports EtherNet/IP</li> <li>• Web-based visualization with additional overlays (including circles, arcs, a coordinate system)</li> <li>• Smart Cameras can now also be set up with uniVision software using a gateway.</li> </ul> <p>uniVision for VisionSystems</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device now also supports EtherNet/IP</li> <li>• Web-based visualization with additional overlays (including circles, arcs, a coordinate system)</li> <li>• I/O device: New I/O function: “Ready for operation”</li> </ul> <p>uniVision for 2D/3D profile sensors:</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device now also supports EtherNet/IP</li> <li>• Web-based visualization with additional overlays (including circles, arcs, a coordinate system)</li> <li>• I/O device: New I/O function: “Ready for operation”</li> </ul> <p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• Changing projects via digital inputs and outputs now works again for Smart Cameras and control units.</li> <li>• I/O device for Smart Cameras and control units: Error handling for the replacement value “true” now functions correctly.</li> <li>• The Firefox browser on the control unit no longer crashes after the visualization is displayed for longer periods of time.</li> <li>• uniVision software no longer crashes when regions used in the image comparison module are changed.</li> <li>• The firmware of the digital cameras can now be updated via uniVision software again.</li> <li>• Measuring and point cloud measuring module: The angle measurement between two parallel lines now returns 0° as a valid result of the angle calculation.</li> <li>• Spreadsheet calculation module: The =SUM () function now works correctly.</li> </ul>	<p>Projects: 2.5 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.3.0 weQube firmware: 2.3.0 Plugin VisionApp 360: 1.3.0</p>

Version	Release Date	Description/change	Compatibility
2.2.5	14.12.2020	<b>Bugfixes:</b> Updated message in case of incompatible projects or connections to devices with incompatible firmware versions	Projects: 2.4 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.3 weQube firmware: 2.2.3 Plugin VisionApp 360: 1.3.0
2.2.4	15.11.2020	uniVision software for Windows no longer includes older software versions in the installation package for setting up uniVision devices or projects with older versions.  <p style="text-align: center;"><b>NOTE!</b></p> <ul style="list-style-type: none"> <li>• Version 2.2.4 only includes uniVision software for Windows (no firmware files for Smart Cameras and control units).</li> <li>• uniVision 2.2.4 software for Windows can be used to set up uniVision devices or projects with project version 2.4. To set up uniVision devices or projects with other versions, the corresponding version of the Windows software must be installed.</li> </ul> 	Projects: 2.4 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.3 weQube firmware: 2.2.3 Plugin VisionApp 360: 1.3.0
2.2.3	07.09.2020	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• Fixed issues with LIMA commands Project_GetImage and Project_Set not behaving as expected</li> </ul>	Projects: 2.4 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.2 weQube firmware: 2.2.3 Plugin VisionApp 360: 1.3.0


Version	Release Date	Description/change	Compatibility
2.2.2	28.08.2020	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• Fixed BSOD issue when installing uniVision on Windows 10 build 2004</li> <li>• Fixed issue with opening 2.2.x projects after opening older project files</li> </ul>	Projects: 2.4 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.2 weQube firmware: 2.2.2 Plugin VisionApp 360: 1.3.0
2.2.1	12.08.2020	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• Software uniVision for Windows now works again for PCs with operating system Windows 7</li> <li>• Smart Camera and Control Unit: Device IO Unit now works independent of its position in the project tree</li> <li>• Module Pointcloud Region (Output Pointcloud and Points inside/outside Region) works correct with linked coordinate system</li> <li>• Module Spreadsheet: LEFT/RIGHT formula work correct after loading projects</li> <li>• Smart Camera weQube with color image chip: Hue value is now displayed correctly in Device Camera</li> </ul>	Projects: 2.4 2D/3D profile sensor firmware: 1.2.2 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.1 weQube firmware: 2.2.1 Plugin VisionApp 360: 1.3.0

Version	Release Date	Description/change	Compatibility
2.2.0	19.06.2020	<p><b>New functions:</b> uniVision for Smart Cameras:</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device (Profinet)</li> </ul> <p style="text-align: center;"><b>NOTE!</b></p> <div style="display: flex; align-items: center;">  <p>EtherNet/IP is not supported with uniVision 2.2.0! It is necessary to use weQube firmware 1.4.6 and software weQube to communicate via EtherNet/IP.</p> </div> <ul style="list-style-type: none"> <li>• FTP device (save on SD card, linkable file name)</li> <li>• Web-based visualization with overlays</li> <li>• Counter module</li> <li>• Spreadsheet module (new formulas, cell selection, formula assistant)</li> <li>• Status display of results in uniVision software</li> <li>• Initialized behavior after device start and project change (run counter starts e.g. with 0)</li> </ul> <p>uniVision for vision systems:</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device (Profinet)</li> <li>• FTP device</li> <li>• Web-based visualization with overlays</li> <li>• Counter module</li> <li>• Spreadsheet module (new formulas, cell selection, formula assistant)</li> <li>• Status display of results in uniVision software</li> <li>• Initialized behavior after device start and project change (run counter starts e.g. with 0)</li> </ul> <p>uniVision for 2D/3D profile sensors:</p> <ul style="list-style-type: none"> <li>• Industrial Ethernet device (Profinet)</li> <li>• VisionApp 360 plugin support</li> <li>• FTP device</li> <li>• Web-based visualization with overlays</li> <li>• Counter module</li> <li>• Spreadsheet module (new formulas, cell selection, formula assistant)</li> <li>• Status display of results in uniVision software</li> <li>• Initialized behavior after device start and project change (run counter starts e.g. with 0)</li> </ul> <p>Closing a security gap: Closing the Telnet port</p> <p><b>Further bug fixes</b></p>	<p>Projects: 2.4 2D/3D profile sensor firmware: 1.2.1 Digital camera firmware: 2.0.4171 Control unit firmware: 2.2.0 weQube firmware: 2.2.0 Plugin VisionApp 360: 1.3.0</p>


Version	Release Date	Description/change	Compatibility
2.1.4	14.12.2020	<b>Bugfixes:</b> Updated message in case of incompatible projects or connections to devices with incompatible firmware versions	Projects: 2.3 2D/3D profile sensor firmware: 1.2.0 Digital camera firmware: 2.0.4171 Control unit firmware: 2.1.2 weQube firmware: 2.1.2
2.1.3	15.11.2020	uniVision software for Windows no longer includes older software versions in the installation package for setting up uniVision devices or projects with older versions.  <p style="text-align: center;"><b>NOTE!</b></p> <ul style="list-style-type: none"> <li>• Version 2.1.3 only includes uniVision software for Windows (no firmware files for Smart Cameras and control units).</li> <li>• uniVision 2.1.3 software for Windows can be used to set up uniVision devices or projects with project version 2.3. To set up uniVision devices or projects with other versions, the corresponding version of the Windows software must be installed.</li> </ul> 	Projects: 2.3 2D/3D profile sensor firmware: 1.2.0 Digital camera firmware: 2.0.4171 Control unit firmware: 2.1.2 weQube firmware: 2.1.2
2.1.2	24.03.2020	<b>Bugfixes:</b> <ul style="list-style-type: none"> <li>• VisionSystem2D: Recording Start signal is now sent after finishing the writing of the parameters to the Digital Cameras (relevant at system start)</li> <li>• Correct roll-out of all scripts for the control unit in the production (concerns e.g. licenses of modules code 1D, code 2D and pattern match)</li> <li>• Optimizations when recording teach+ projects</li> </ul>	Projects: 2.3 2D/3D profile sensor firmware: 1.2.0 Digital camera firmware: 2.0.4171 Control unit firmware: 2.1.2 weQube firmware: 2.1.2

Version	Release Date	Description/change	Compatibility
2.1.1	28.10.2019	<p><b>Bugfixes:</b></p> <ul style="list-style-type: none"> <li>• After rebooting only the digital camera, the project settings of the running uniVision application are written correctly to the digital camera.</li> <li>• After rebooting the vision system in hardware triggered mode, after the first trigger signal the uniVision application does no longer send permanent results.</li> <li>• Module Code 2D: Error handling of quality values</li> <li>• Start project in uniVision application is now saved correct</li> <li>• Device digital camera: Tool to show the image in a quick way now works stable (to adjust focus and iris of the lens)</li> <li>• Digital camera: Pixel format Mono 8 at color cameras</li> <li>• Automatic connect to devices with older firmware versions</li> <li>• Trigger behavior and result calculation when recording teach+</li> <li>• Chunk data at teach+</li> <li>• Module Spreadsheet: Correct error handling of If-Else formulas</li> <li>• Device TCP: Use of special characters like Ä, ä or Ö</li> <li>• Device TCP and FTP: Correct error handling of active blocking mode</li> <li>• Program to capture screenshots on the control unit is available again</li> <li>• Permanent saving of date and time of the control unit</li> <li>• Changing parameters does no longer increase the run counter</li> <li>• Updated translations</li> </ul>	<p>Projects: 2.3 2D/3D profile sensor firmware: 1.1.6 Digital camera firmware: 2.0.4171 Control unit firmware: 2.1.1 weQube firmware: 2.1.1</p>

Version	Release Date	Description/change	Compatibility
2.1.0	17.07.2019	<p><b>New functions:</b></p> <p>uniVision for Smart Cameras:</p> <ul style="list-style-type: none"> <li>• Flexible, project dependent website for visualization</li> <li>• Module Spreadsheet</li> <li>• Optimized gain values for Smart Cameras with color image chip when using external illuminations</li> <li>• Teach+ optimizations</li> <li>• Firmware update and reboot via device list</li> <li>• Network scan of devices via IP address</li> <li>• Device FTP: Saving on SD card is no longer possible (only saving on FTP server)</li> <li>• Module Code 2D: Recognition mode "Maximum" is no longer available</li> </ul> <p>uniVision for Vision Systems</p> <ul style="list-style-type: none"> <li>• New products are supported: vision system with digital cameras</li> <li>• Image based modules</li> <li>• New Module Blob</li> <li>• Flexible, project dependent website for visualization</li> <li>• Module Spreadsheet</li> <li>• Teach+ optimizations</li> <li>• Firmware update and reboot via device list</li> <li>• Project change via digital inputs of control unit</li> <li>• Fast project change</li> <li>• Program to record the screen on the control unit</li> </ul> <p>uniVision for 2D/3D Sensors</p> <ul style="list-style-type: none"> <li>• Flexible, project dependent website for visualization</li> <li>• Module Point Cloud Pattern Match</li> <li>• Device wecat3d: Reduce readout area and increase recording line rate</li> <li>• Module Spreadsheet</li> <li>• Module Point Cloud Measure: Extended by segments tool with minimum and maximum segments angle</li> <li>• Teach+ optimizations</li> <li>• Firmware update and reboot via device list</li> <li>• Find 2D/3D profile sensors with article numbers OPT</li> <li>• Project change via digital inputs of control unit</li> <li>• Fast project change</li> <li>• Program to record the screen on the control unit</li> </ul> <p><b>Further bugfixes</b></p>	<p>Projects: 2.3 2D/3D profile sensor firmware: 1.1.5 Digital camera firmware: 1.9.3350 Control unit firmware: 2.1.0 weQube firmware: 2.1.0</p>

Version	Release Date	Description/change	Compatibility
2.0.6	14.12.2020	<p><b>Bugfixes:</b> Updated message in case of incompatible projects or connections to devices with incompatible firmware versions</p>	<p>Projects: 2.2 2D/3D profile sensor firmware: 1.1.6 Digital camera firmware: 2.0.4171 Control unit firmware: 2.0.4 weQube firmware: 2.0.4</p>
2.0.5	15.11.2020	<p>uniVision software for Windows no longer includes older software versions in the installation package for setting up uniVision devices or projects with older versions.</p> <p><b>NOTE!</b></p> <ul style="list-style-type: none"> <li>Version 2.0.5 only includes uniVision software for Windows (no firmware files for Smart Cameras and control units).</li> <li>uniVision 2.0.5 software for Windows can be used to set up uniVision devices or projects with project version 2.2. To set up uniVision devices or projects with other versions, the corresponding version of the Windows software must be installed.</li> </ul> 	<p>Projects: 2.2 2D/3D profile sensor firmware: 1.1.6 Digital camera firmware: 2.0.4171 Control unit firmware: 2.0.4 weQube firmware: 2.0.4</p>
2.0.4	28.10.2019	<ul style="list-style-type: none"> <li>Updated Third-Party Software Licenses</li> <li>Correct closing of offline projects</li> </ul>	<p>Projects: 2.2 2D/3D profile sensor firmware: 1.1.6 Control unit firmware: 2.0.4 weQube firmware: 2.0.4</p>
2.0.3	21.03.2019	<p><b>Bug fixes:</b></p> <ul style="list-style-type: none"> <li>Fix connection problems from Software uniVision to Smart Camera weQube</li> </ul>	<p>Projects 2.2 2D/3D profile sensor firmware: 1.1.1 Control unit firmware: 2.0.3 weQube firmware: 2.0.3</p>

Version	Release Date	Description/change	Compatibility
2.0.2	08.02.2019	<b>Bug fixes:</b> <ul style="list-style-type: none"> <li>• Device TCP/UDP/RS232: Carriage return is now working correct</li> <li>• Zoom in and out in the scene of the uniVision software with plus and minus buttons</li> <li>• Module Point Cloud Coordinate System: Several bugfixes for correct tracking</li> <li>• Module Point Cloud Calculus: Several bugfixes with linked coordinate system</li> <li>• Module Measure and Module Point Cloud Measure: Several bugfixes for find line tool and sorting segments</li> <li>• Triggering uniVision application via LIMA command (Software)</li> <li>• Set startup project and load project via OLED display of weQube with long project names</li> <li>• Open projects with special characters in project or module names offline</li> </ul>	Projects 2.2 2D/3D profile sensor firmware: 1.1.1 Control unit firmware: 2.0.2 weQube firmware: 2.0.2
2.0.1	5.10.2018	<b>Bug fixes:</b> <ul style="list-style-type: none"> <li>• Load projects on control unit with default network settings of control unit</li> <li>• Open templates on control unit with default network settings of control unit</li> <li>• Record teach+ with F5</li> <li>• Behavior of digital inputs and outputs after loading projects (for weQube and control unit)</li> </ul>	Projects: 2.2 2D/3D profile sensor firmware: 1.1.1 Control unit firmware: 2.0.1 weQube firmware: 2.0.1

Version	Release Date	Description/change	Compatibility
2.0.0	13.07.2018	<p><b>Description:</b></p> <p>uniVision for Smart Cameras:</p> <ul style="list-style-type: none"> <li>• New products are supported: weQube Smart Camera</li> <li>• Templates and uniVision assistant for specific modules</li> <li>• Measuring module: Find tool point</li> <li>• Measuring/coordinate system module: Adjust maximum geometry</li> <li>• TCP device module</li> </ul> <p>uniVision for 2D/3D Sensors:</p> <ul style="list-style-type: none"> <li>• weCat3D device module: Further sensor parameters and sensor data</li> <li>• Templates</li> <li>• Teach+ recording and offline processing of projects</li> <li>• uniVision for Windows for editing uniVision applications</li> <li>• Point cloud measuring module: Find tool point</li> <li>• Point cloud measuring module: Find point usage for the tools line and arc</li> <li>• Point cloud measuring module: Local minimum and maximum</li> <li>• Calculus module: Find edges</li> <li>• Additional languages</li> </ul> <p><b>Bug fixes</b></p> <p> <b>NOTE!</b> After updating to 2.0, Industrial Ethernet is no longer available at the weQube!</p>	<p>Projects: 2.2 2D/3D profile sensor firmware: 1.1.1 Control unit firmware: 2.0.0 weQube firmware: 2.0.0</p>
1.1.3	19.03.2018	<p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>• Installation of plugins (e.g. robot interfaces) on control unit</li> <li>• Additional port 32005 for uniVision applications in live mode</li> </ul> <p><b>Bug fixes:</b></p> <ul style="list-style-type: none"> <li>• Point cloud coordinate system module in error state</li> <li>• TCP device module in trigger mode software</li> <li>• Following the system start, a connection to multiple 2D-/3D sensors is established automatically</li> <li>• Linking of point clouds from a point cloud filter module to another point cloud filter module</li> <li>• Change properties of uniVision applications (in German)</li> <li>• point cloud measuring module shows the found arcs and arc segments correctly</li> <li>• Further minor bug fixes</li> </ul>	<p>Projects: 2.1 2D/3D profile sensor firmware: 1.1.0</p>

Version	Release Date	Description/change	Compatibility
1.1.0	27.03.2017	<p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>• Several applications and 2D/3D sensors per control unit</li> <li>• Extended function of the 2D/3D sensors (trigger modes, temperature)</li> <li>• TCP device module</li> <li>• Extensions in the point cloud measuring module (find segments, turning points)</li> <li>• Extension in the point cloud region module (area, center of gravity)</li> <li>• Point cloud filter module</li> <li>• Language DE</li> <li>• Further more minor functions</li> </ul> <p><b>Eliminated errors:</b></p> <ul style="list-style-type: none"> <li>• Links remain in place during the project change</li> </ul>	Projects: 2.1 2D/3D profile sensor firmware: 1.0.8
1.0.0	31.08.2016	Official version for market launch	Projects: 2.0 2D/3D profile sensor firmware: 1.0.0