

Gocator Firmware 6.4

Firmware Version 6.4.41.16

Document Revision A

Compatibility

Web Interface

- The web interface requires Chrome, Firefox or Microsoft Edge version 79 or later.
- IE 11 and old Edge versions are only supported in a limited fashion (see known issues for details).

Hardware

- Supported models
 - Gocator 2100C/D, 2300C/D, 2400, 2500, 2600, and 2800C series line profilers
 - Gocator 3200 and 3500 series snapshot sensors
 - GoMax NX, ORIN, ORIN+
- No longer supported:
 - Original GoMax
 - Gocator 1300, 2100A, 2300A/B, 2880A, and 3100 series sensors

SDK

- The 6.x releases are compatible with the 4.x and 5.x SDK.

Windows 32-bit support removed

- Only 64-bit versions of Gocator Emulator, Accelerator and SDK binaries are available.

Improvements

General

<i>GoMax ORIN/ORIN+ Support</i>	This firmware introduces support for the GoMax ORIN and ORIN+ models.
<i>PROFINET Support for PC</i>	The PROFINET protocol is now supported from PC-accelerated sensors.
<i>G2610, 2618, 2629 Scenarios</i>	Emulator scenarios were added for G2610, 2618 and 2629 sensors

Tool Enhancements

<i>Surface Filter</i>	Enhanced the Surface Filter tool to load a feature plane from other tools when using a Relative Threshold filter.
<i>Surface Pattern Matching</i>	Surface Pattern Matching now allows specifying a custom file name. And, when a sensor is accelerated on PC, a custom path can also be specified.
<i>Surface Stitch</i>	Added a new interpolation mode to Surface Stitch allowing for better quality output in cases of large X and Y rotations.
<i>Feature Create</i>	A new mode was added to Feature Create to create a circle tangent to two lines. This is also available in 6.3 SR2 but not previously mentioned.

Bug Fixes

General

<i>Moving Disc Alignment Speed</i>	Moving Disc alignment required higher minimum motion speed than in 6.1 release builds.
<i>GoMax Large Upgrade Package</i>	It was not possible to upgrade GoMax with very large upgrade packages such as those required for Anomaly Detector.
<i>G2540/2550 FOV Configuration</i>	The FOV of the Gocator 2540 and 2550 was incorrectly configured slightly larger than the design specification. With this release, the FOV is reduced and the resulting X resolution minimum increased.
<i>G3 B "Failed to Start" Error</i>	G3 B version sensors could show a "Failed to Start" error with specific exposure times.
<i>G3 Overheat Warning Icon</i>	On G3 snapshot sensors, after being in an overheated state, the warning icon could stay in the user interface.
<i>Accelerated Sensor Data Loss</i>	For accelerated sensors with a trigger interval over 10 seconds, the sensor could stop producing scan data after running for some time.
<i>G3 B Job Load Time</i>	The job load time on G3 B version sensors was higher than G3 A version sensors.
<i>Configure View in Video Mode</i>	Selecting the Configure View button in Video mode caused the data viewer to go blank.
<i>SDK Enhanced Surface Flatness</i>	Issue fixed where SDK calls for Enhanced Surface Flatness weren't reflected in the UI. Now, the UI and SDK values are synchronized and the UI matches the value adjusted by the SDK.
<i>.NET SDK Degrees of Freedom</i>	In the .NET SDK, the degrees of freedom definition was incorrect.
<i>.NET SDK Geometric feature types</i>	Addressed an issue where the .NET SDK was missing some GoDataMessageType constants for geometric features. The newly



	added constants—FeaturePoint, FeatureLine, FeaturePlane, and FeatureCircle— provide predefined IDs for these feature types.
<i>GoMax Log File Size Limit</i>	Log files on a GoMax for individual acceleration sessions could grow unrestricted. A limit has been added.
<i>Cognex Vision Pro AIK</i>	Three issues affected the Cognex Vision Pro AIK plugin <ol style="list-style-type: none"> 1. The image size through the plugin did not match the original size in some cases. 2. A timeout could occur when intensity output was enabled. 3. The plugin did not allow starting the sensor when using encoder triggering.

Tool Bug Fixes

<i>Part Detection Surface Missing Surfaces</i>	Part Detection could miss some surfaces when many were detected in a single row.
<i>Part Detection Crash</i>	Using Part Detection with no data in the first frame would cause a crash to occur.
<i>Surface Align Wide</i>	A crash could occur when using Surface Align Wide with Target X/Y/Z angles
<i>Surface Segmentation Area Missing some areas</i>	Under some conditions Surface Segmentation could miss some areas due to the thresholding method used. More thresholding options are added.
<i>Surface Curvature Incorrect Results</i>	Surface Curvature could provide incorrect results when running on a sensor with a large sampling step.
<i>Surface Curvature Intensity Output</i>	The intensity output from the Surface Curvature tool was incorrect in some cases.
<i>Surface Merge Wide Y Axis Correction</i>	Surface Merge Wide did not correctly load the Y Axis Correction used in Surface Align Wide.
<i>Mesh Projection Shift</i>	The Mesh Projection tool produced results that are slightly shifted relative to the input data.

Known Issues

<i>GoMax support.cgi</i>	<p>Downloading a GoMax support file with /support.cgi results in the UI needing to be refreshed.</p> <p>Workaround: Manually refresh the UI</p>
<i>Factory Restore does not delete tool-created files</i>	Factory Restore does not delete files created by tools. This includes Surface Pattern Matching and Surface Track.



	To ensure tool files are removed from a sensor, add the appropriate tool and perform a “Delete” operation on any files.
<i>Surface Track</i>	The Surface Track tool is not supported on the GoMax device.
<i>Surface Section</i>	With a profile from the Surface Section tool, it is not possible to obtain Global X & Y measurements from the Profile Bounding Box tool.
<i>Surface Blob</i>	Renaming some of the measurement outputs from Surface Blob is not supported. Though the change may appear to be made, it is not persisted when saving a job file.
<i>Script Tool</i>	Memory leaks can occur when using <i>arrays</i> and <i>structs</i> within a script. Workaround: Avoid using arrays and structs or test thoroughly to ensure stability.
<i>Zoom to rectangle</i>	In profile mode, when disabling 1:1 mode, zoom to rectangle does not fully zoom
<i>Translations incomplete</i>	Not all English text is translated in every language.
<i>EtherNet/IP</i>	Due to a change in Rockwell Studio 5000 Logix Designer V34 and above, module tags for EDS AOP devices may not display correctly, or tag structures may change unexpectedly when creating or upgrading projects. Workaround: Install the latest Add-On Profile (AOP) update for ControlLogix Analog modules (version 40.14.70). For more information, see https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/1150229 .
<i>Internet Explorer 11</i>	Several issues exist with Internet Explorer 11: <ul style="list-style-type: none"> • Launching and using additional data viewers is very slow. • Using large data sets may not be possible due to browser memory limitations. Workaround: Refer to the Gocator user manual for IE 11 specific instructions to work around some of the issues.



SDK and Protocol changes (Protocol version 101.21)

The protocol version is specified as [Major].[Minor]. Firmware releases with the same Protocol Major version are backward compatible and users do NOT need to recompile their applications unless features in the newer version are used.

The 6.x SDK will not discover any sensors with firmware 4.2 or earlier by default. Use `GoSystem_EnableDiscoveryCompatibility()` to enable discovery of sensors with older firmware.

SDK

HDR Support for SDK.NET

The .NET SDK now includes APIs for HDR mode including `GoHdrMode` to get and set the HDR mode, `SetHdrParameters` to set the HDR parameter value and other methods for verifying HDR parameters and settings.

Configuration and Protocol changes

No significant changes were made compared to the previous version 6.3 SR2.

GDK

A new version of the GDK prerequisites package is required.

