

Gocator Firmware 4.7 SR1 - Release Notes

Firmware Version 4.7.12.116

Document Revision B

Compatibility

The Gocator 4.x web interface requires IE 9 or newer, Firefox or Chrome. Adobe Flash version 11 or above is also required.

The .rec and .gs file formats have changed between 4.6 and 4.7 releases so it is not possible to load recordings and Gocator support files generated from 4.7 firmware on sensors or emulator instances with 4.6 or earlier. Recordings and support files from 4.6 can be loaded on 4.7 as usual though.

Improvements

<i>Fixed length ASCII</i>	It is now possible to use C language printf-style formatting in custom format ASCII output. This allows fixed length formatting for easier input parsing in PLC and robot controller logic. For example, use %sprintf[%09d, %value[0]] for 9 character length with zero prefix.
<i>Profile Round Corner Tool</i>	Added circle center and edge point geometric features to the Profile Round Corner tool.
<i>Accelerator output buffer</i>	The GoX Accelerator output buffer was increased to allow rapid output of large surface data.

Fixes

<i>Acquire Intensity</i>	A memory leak could occur with Acquire Intensity enabled and Part Detection enabled.
<i>Emulator Gocator Ethernet output</i>	Output from the Emulator over the Gocator Ethernet protocol to SDK or GenTL driver was failing due to incorrect port assignment.
<i>Bottom surface shifted</i>	The bottom surface for opposite layout sensor configurations including ring configurations was shifted in the X direction relative to the Top data.
<i>"Processing error"</i>	With the Profile Position and Profile Dimension tools set to use certain feature types a "Processing Error" message could be output in the web interface logging panel.
<i>G3 acceleration performance</i>	The maximum frame rate of G3 snapshot sensors while using the GoX Accelerator was reduced compared to the 4.6 release.
<i>G200 buddying</i>	It was possible to attempt to buddy Gocator 200 multi-point sensors and this caused sensors to reset. It is now not possible to buddy these sensors.

<i>Measurement overflow</i>	Measurement overflows could be incorrectly counted as failures rather than overflows in the dashboard.
<i>Profile Position and Profile Dimension</i>	Some Profile Position and Dimension measurements could be incorrect on data from opposite layout systems.
<i>Slow GDK tool with buddy system</i>	Buddy systems could fail to scan under some conditions if a GDK tool modified a parameter during extended processing.
<i>Alignment failed to complete</i>	Moving Bar alignment on buddy systems could fail to complete under some circumstances, forcing the user to cancel the operation.
<i>Encoder value over SDK</i>	In the Gocator protocol output to SDK, the encoder value in the stamp information for when uniform spacing was disabled was always zero.
<i>Alignment with multiple holes</i>	Performing Stationary Bar alignment with more than one hole present in a sensor's field of view could result in the incorrect hole being used to determine the X offset. Now the alignment will correctly use the center-most hole for alignment.
<i>False points with Z Angle</i>	In Surface mode, for buddy systems with sensors with a non-zero Z Angle value, false points could be produced outside of the surface in the second and subsequent surfaces.
<i>Tracking at high rates</i>	When operating at 4kHz or higher with tracking enabled, drops were produced that eventually lead to no profiles being generated.
<i>Tracking visualization</i>	With tracking enabled, and the profile at a sharp angle, the data display was blank while the tracking algorithm was searching for a horizontal profile.
<i>Ethernet ASCII</i>	An error was produced when trying to switch jobs over Ethernet ASCII protocol while a sensor was running.
<i>Video image on G3 sensors</i>	When enabling and disabling the data viewer settings, the video image from one camera could go blank.
<i>Stop emulation</i>	After moving the ROI of a tool within a loaded scenario and clicking "Stop Emulation" a JavaScript error message could pop up.
<i>Focus pattern</i>	On first attempt to acquire a snapshot in Video mode with Focus Pattern selected as the pattern sequence the scan would fail. Subsequent snapshots succeeded.

Known Issues

<i>Profile mode recordings with X or Z Angle</i>	Playing back recordings on sensor or emulator does not allow visualizing the profile when X Angle or Z Angle is non-zero.
<i>Scroll wheel in Microsoft Edge browser</i>	At the time of the release, the mouse scroll wheel did not work as expected in the data viewer (zoom in/out) when using the Microsoft Edge browser under Windows 10. A workaround is to hold down the right mouse button and scroll.
<i>.NET SDK wrapper</i>	Manual freeing of objects using Dispose() is necessary since the .NET SDK wrapper does not automatically free memory. If this is not done, memory



leaks will occur.

Translations incomplete Not all English text is translated in every translation.

SDK and Protocol Changes

Protocol Version 101.9

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. Note that these are protocol and SDK changes between Release 4.7 and Release 4.7 SR1. Refer to the Gocator 4.x SDK migration guide for details on how to port your 3.x application to Gocator 4.x firmware.

SDK

Action Name	Description of change
<i>Added</i> GoSensor_IsResponsive	Added for convenience rather than using GoSensor_State to determine whether a sensor is actively responding. Note this should be used rather than GoSensor_IsConnected to determine if a network connection to a sensor was lost.
<i>Added</i> GO_HEALTH_*	Added new health indicator IDs
<i>Added</i> GoProfileRoundCorner*	Added functions around new output geometric features in Profile Round Corner tool

Configuration and Protocol changes

Action	Type	Name	Description of change
<i>Added</i>	Configuration	ToolOptions/ProfileRoundCorner/FeatureOptions/EdgePoint ToolOptions/ProfileRoundCorner/FeatureOptions/CenterPoint Tools/ProfileRoundCorner/Features/EdgePoint Tools/ProfileRoundCorner/Features/CenterPoint	Settings related to Edge and Center point geometric features now returned by Profile Round Corner tool.
<i>Corrected</i>	Protocol (Gocator)	Indicator Identifiers	Several corrections made to the <i>Indicator identifiers</i> table in <i>Health Results</i> in the Gocator user manual.

