Revision: A

Gocator 1100, 1300, 2000 and 2300 Firmware Release Notes Version 3.4.2.2

New Features:

Internal cooling element support	Gocator firmware now supports sensors with internal cooling. This will add extra protection to Gocators with high power lasers when operating in high temperature environments. *This feature is only available on special Gocator models equipped with 3B Near-Infrared lasers.*
16-bit grey scale image output support in the Gocator GenTL driver	GenTL driver adds support for 3rd party processing software that can only process 16-bit grey scale image. Users can choose between 16-bit RGB format and 16-bit grey scale format.

Improvements:

Additional Gocator 1100 and 1300 models	Added support for all Gocator 1100 and 1300 models.
Improved Halcon procedure and example	A new Halcon procedure is added to illustrate how to calculate real-world coordinates from the height map received from the Gocator GenTL driver.
Gocator transformation parameters access from the Gocator GenTL driver	Gocator transformation parameters can be accessed from the Gocator GenTL driver through new registers.

Fixes:

Corrected calibration disk height	The default height values for the Gocator calibration disks (40mm and 100mm diameter) are corrected. Previous values were off by 0.10mm. *Note: This does NOT correct the measurements from Gocators that are already calibrated with the incorrect height values. Users who used the Gocator calibration disk for calibration should re-calibrate their sensors with the new firmware.*

Known Issues:

Incomplete language translations	The web interface is not fully translated in some supported languages (i.e. Japanese and Korean).
Auto-set occasionally may fail on highly reflective target	Auto-set may return incorrect exposure values on sensors with high laser power or when scanning highly reflective targets.
Loses data when using Selcom Serial with frame rate lower than 3kHz	Frame rate lower than 3kHz may cause data loss when outputting on Selcom serial.

Protocol Changes:

This firmware version can read configuration and template files saved with firmware version 2.2.1 or later. User applications must be built against the SDK library included with this firmware release.

Action	Type	Name	Description of change

GenTL Driver Changes:

Action	Description of change
Change	A pixel value of 32768 in the 16-bit height map represents zero. Previously a value of 32767 was used. Same as before, value of 0 continues to represent invalid height. Users who threshold the image to retain zero and positive height should now use a minimum threshold of 32768 (not 32767 as before)
Change	Resample mode and image size is longer be set using the GenTL registers. Instead, the data format and resample mode can be set in the *Go2GenTL.xml* file that resides in the same directory as the GenTL driver. Please to the Gocator User Manual on how to configure the settings.