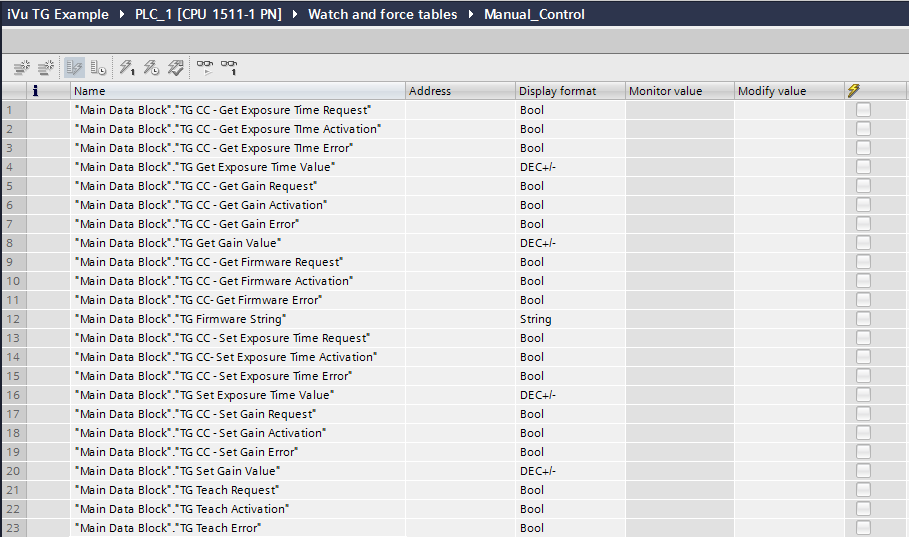
Profinet iVu Plus TG Siemens Example Program

Banner Engineering has created an example program to highlight capabilities that the iVu has available when in Profinet Mode. The program was developed using Siemens Step 7 TIA portal software. A Siemens CPU 1511-1 PN (6ES7 511-1AK00-0AB0) was the PLC used for this example program, but the example can also be referenced with other Siemens PLCs.

The iVu is configured for Industrial Ethernet triggering only. This means that the camera will only trigger off of the Profinet connection. The example program is set up for triggering of the iVu as fast as possible. There are two inspections present on the iVu configuration. The example program switches between these two inspections every 10 seconds. This function would be used when there are multiple projects that require different inspections.

Finally the example package shows how to activate some of the built in functions in the iVu. These include: Get Exposure Time, Get Firmware, Get Gain, Set Exposure Time, Set Gain, and Teach. Normally these functions would be activated via a touch screen. Since there is no way to program these examples for all of the touch screen possibilities the functions are accessed manually. Open up the Manual\_Control window under the **Watch and force tables** area. In the Modify Value box enter a value of True for the Request variable. Example: If you want to run the Get Gain routine place True in the TG CC – Get Gain Request variable. This routine will be activated at the next available opportunity.



The built in functions are configured in a specific manner. The Request variable for each function queues the function up. At the next available opportunity the function will be activated. When this occurs the Activation variable will be turned on. The Activation variable will be turned off after the function has completed its function. If an error occurs during the routine the corresponding error variable is turned on. This variable should be used by an error routine programmed by the user.

Example – Set Exposure Time Function

1. Enter the Exposure Time (in microseconds) into the Set Exposure Time Value variable.
2. Press Shift-F9. This updates the Set Exposure Time Value.
3. Enter the TRUE into the Set Exposure Time Request variable.
4. Press the Shift-F9 button. The Set Exposure Time Function will run.
5. When the Monitor Value for Activation and Request are both false the routine has completed operation.
6. The Exposure Time in the iVu will now be the value set in step 1.