



Subject: EtherNet/IP Configuration	Product: MPiec Controllers	Doc#: AN.MPIEC.07 revc
Title: Configuring an MPiec controller to connect to a VIPA bus coupler		

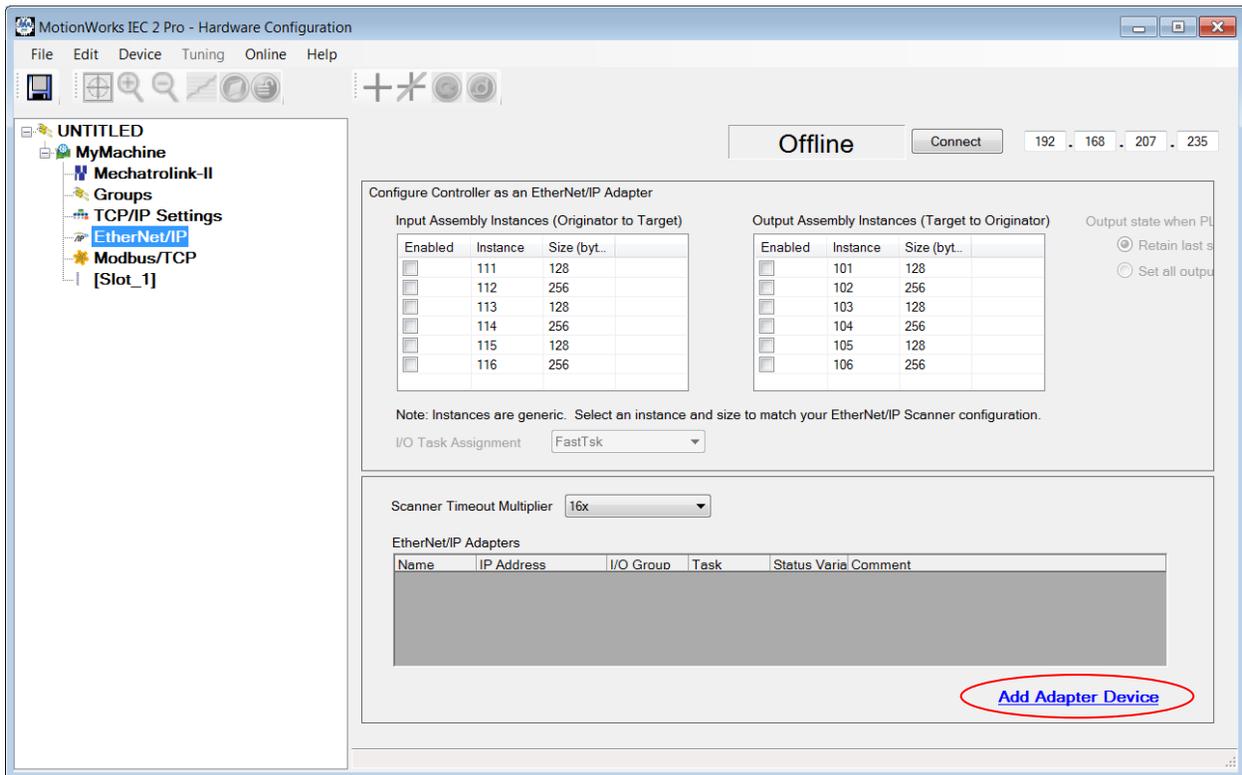
Use this document to configure an MPiec Series Controller to communicate with an EtherNet/IP VIPA bus coupler.

## Recommended minimum firmware:

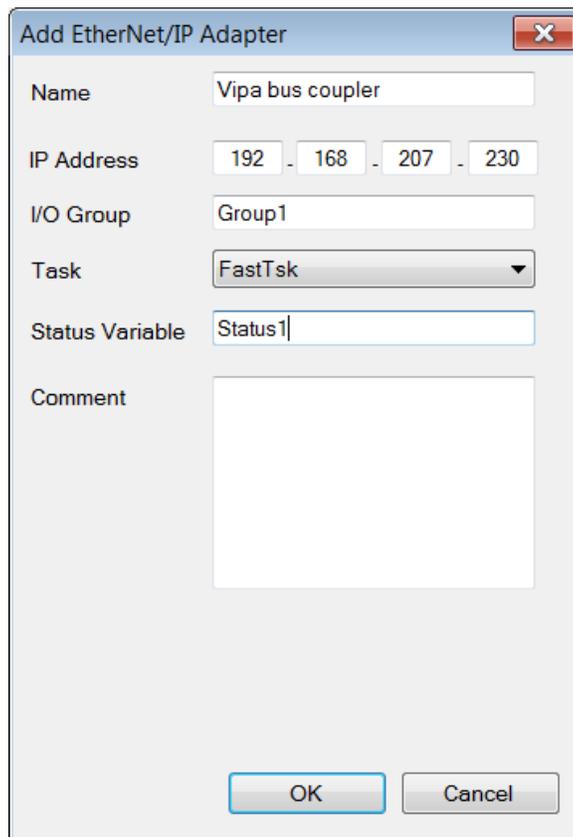
MPiec: 2.6.0

VIPA Bus Coupler: 2.0.10

- 1) In MotionWorks IEC Hardware Configuration, click on the EtherNet/IP node, and then on “Add Adapter Device”.



- 2) Enter a Name (optional), the bus coupler's IP address, an I/O Group name, and a Status Variable name.

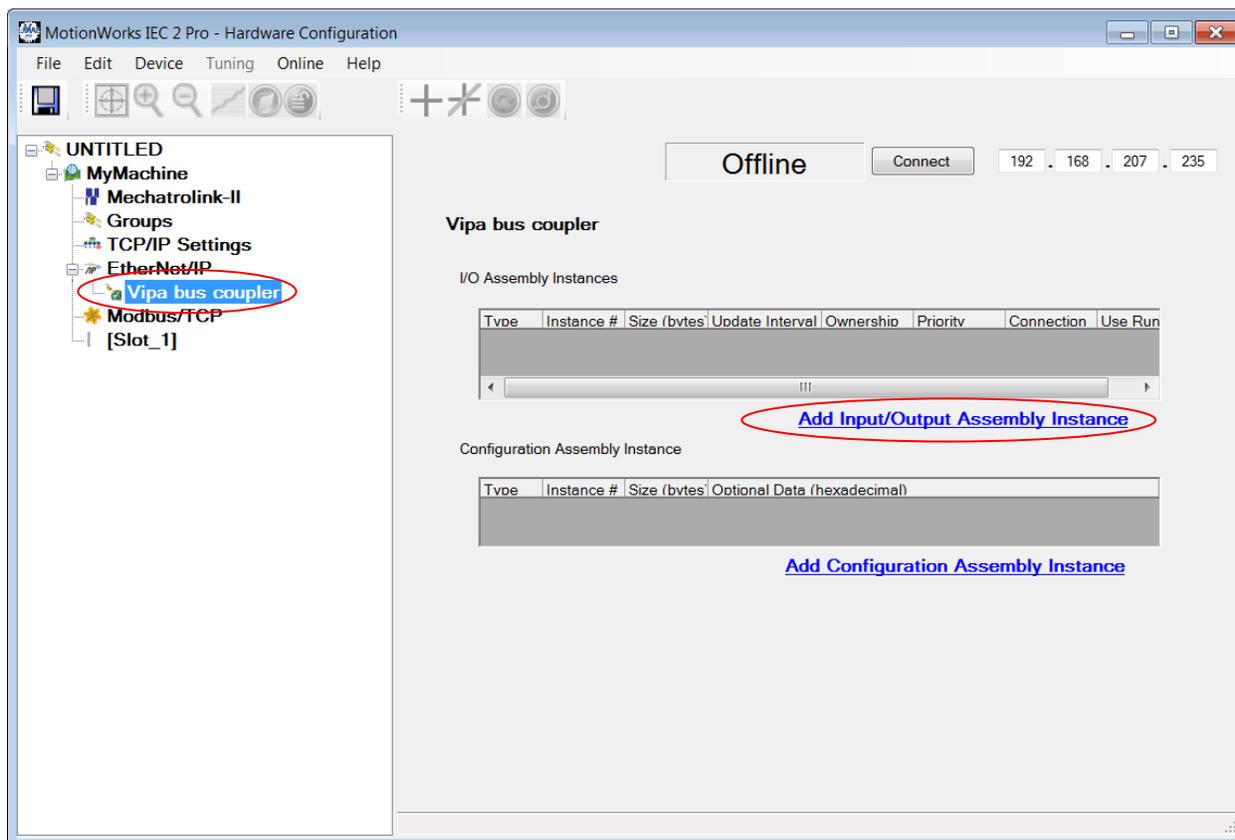


The screenshot shows a dialog box titled "Add EtherNet/IP Adapter". It contains the following fields and controls:

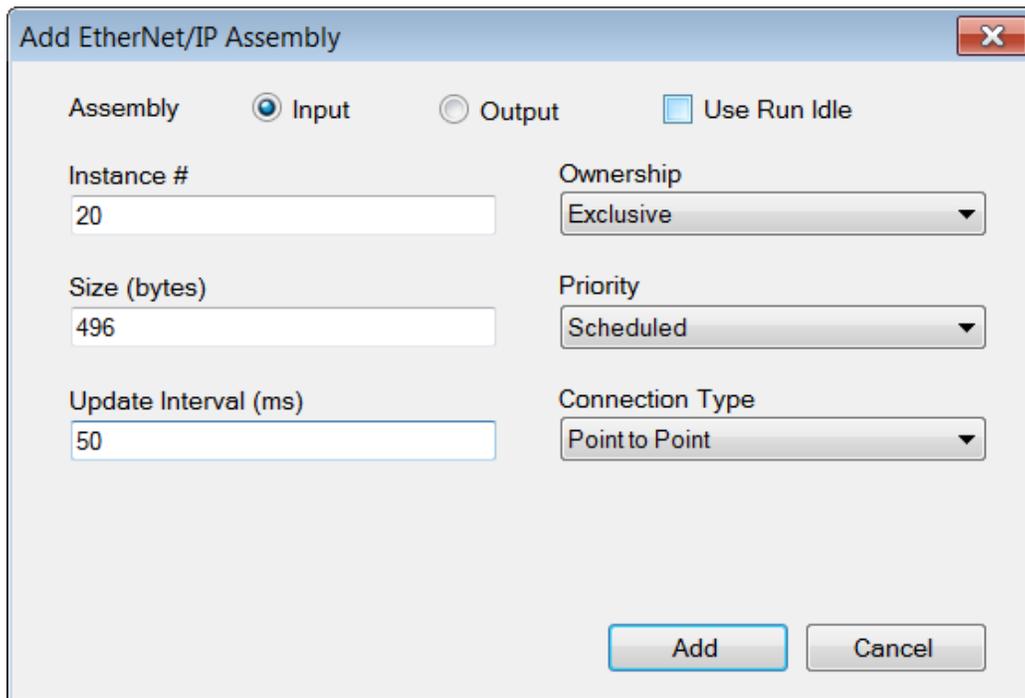
- Name:** Text input field containing "Vipa bus coupler".
- IP Address:** Four separate input boxes containing the values "192", "168", "207", and "230".
- I/O Group:** Text input field containing "Group1".
- Task:** A dropdown menu currently showing "FastTsk".
- Status Variable:** Text input field containing "Status1".
- Comment:** A large empty text area for additional notes.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

- 3) Select OK to close the dialog. The Status Variable will be created in the Global Variables table under the I/O Group name when the Hardware Configuration is saved.

- 4) Click on the name that was entered for the VIPA bus coupler, and then click on the “Add Input/Output Assembly Instance” link.

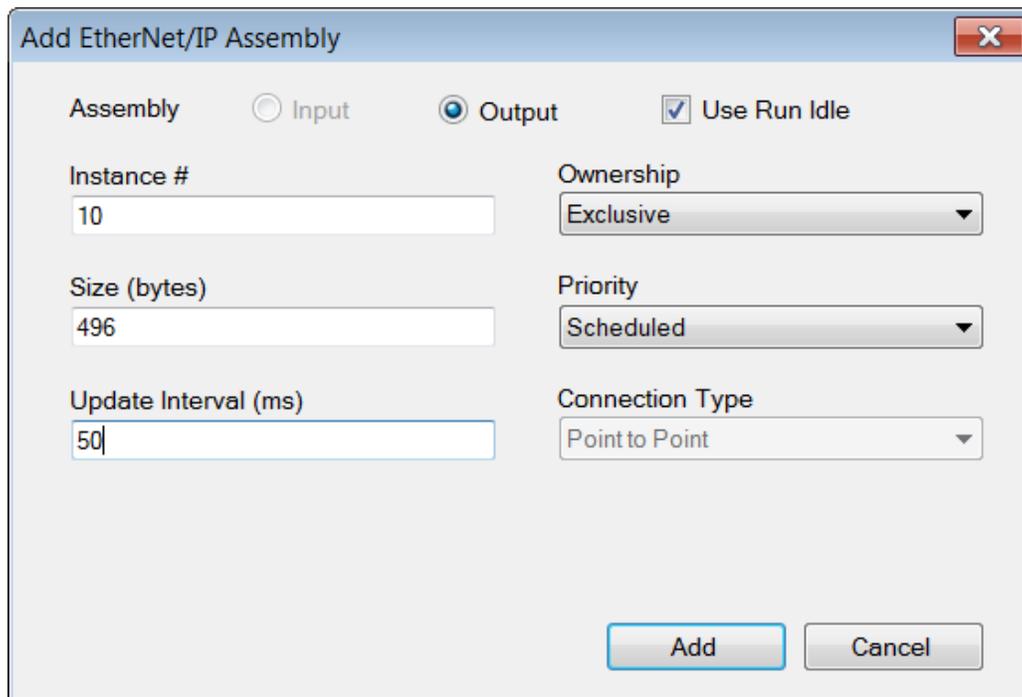


- 5) Enter the input Instance number (20), the Size in bytes (496), the Update Interval, and select Point to Point for the connection type.



- 6) Click “Add” to close this dialog.
- 7) Click on the “Add Input/Output Assembly Instance” link again to add an output instance.

- 8) Enter the output Instance number (10), the Size in bytes (496), and the Update Interval. Select an update interval that is appropriate for the needs of the application and the IEC application task in which the bus coupler data will be used.



**Add EtherNet/IP Assembly**

Assembly  Input  Output  Use Run Idle

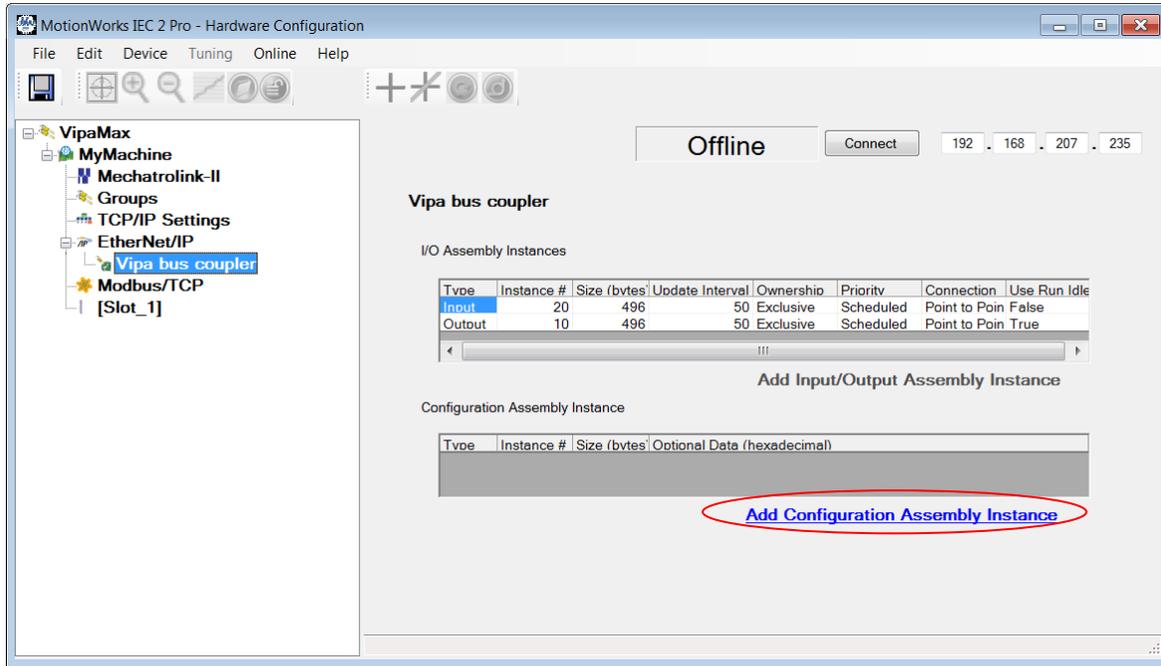
Instance #  Ownership

Size (bytes)  Priority

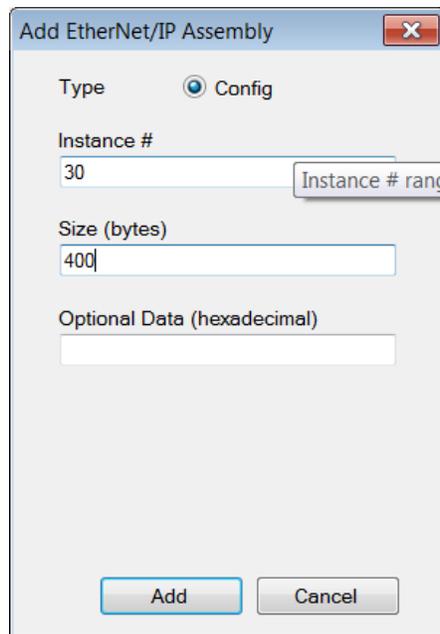
Update Interval (ms)  Connection Type

- 9) Click “Add” to close the dialog.

10) Click on the “Add Configuration Assembly Instance” link



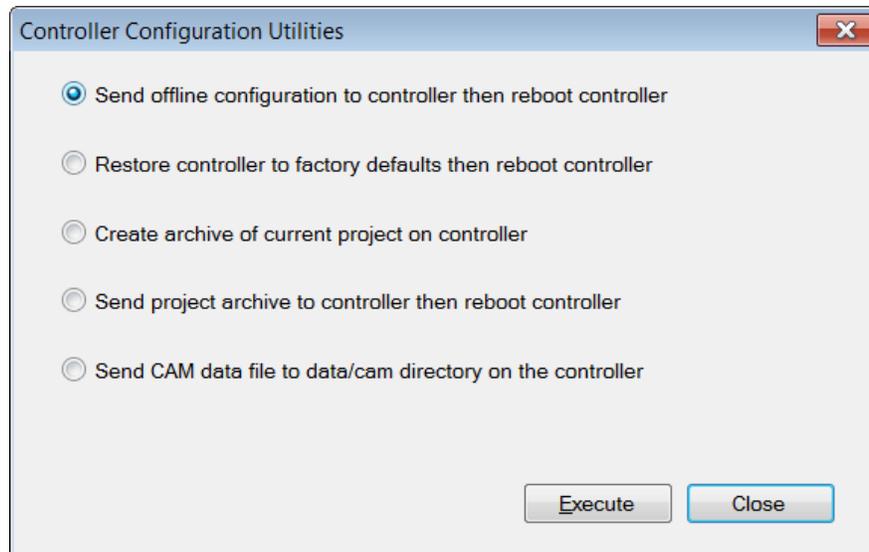
11) Enter the configuration Instance number (30), and the Size in bytes (400).



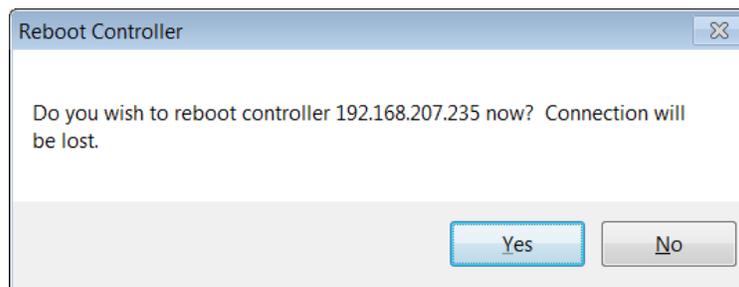




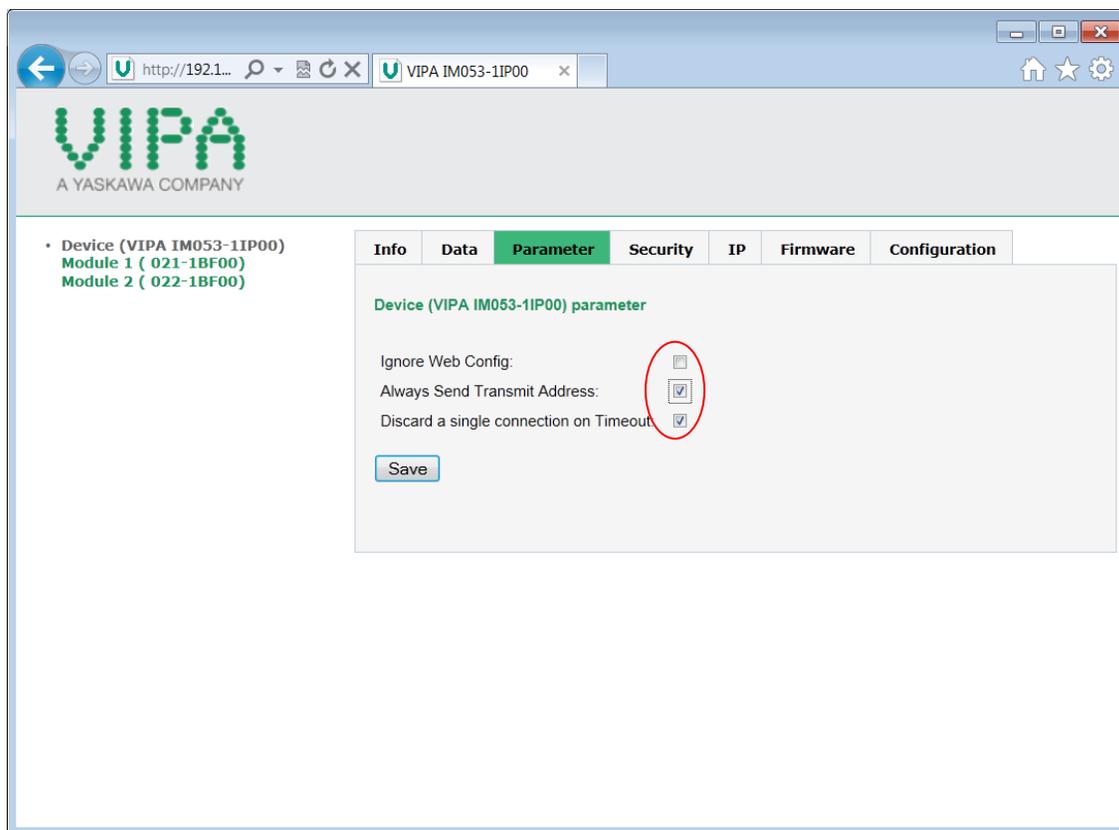
14) In the Controller Configuration Utilities dialog, select “Send offline configuration to controller then reboot controller” and then click “Execute”.



15) When the application prompts to reboot select Yes.

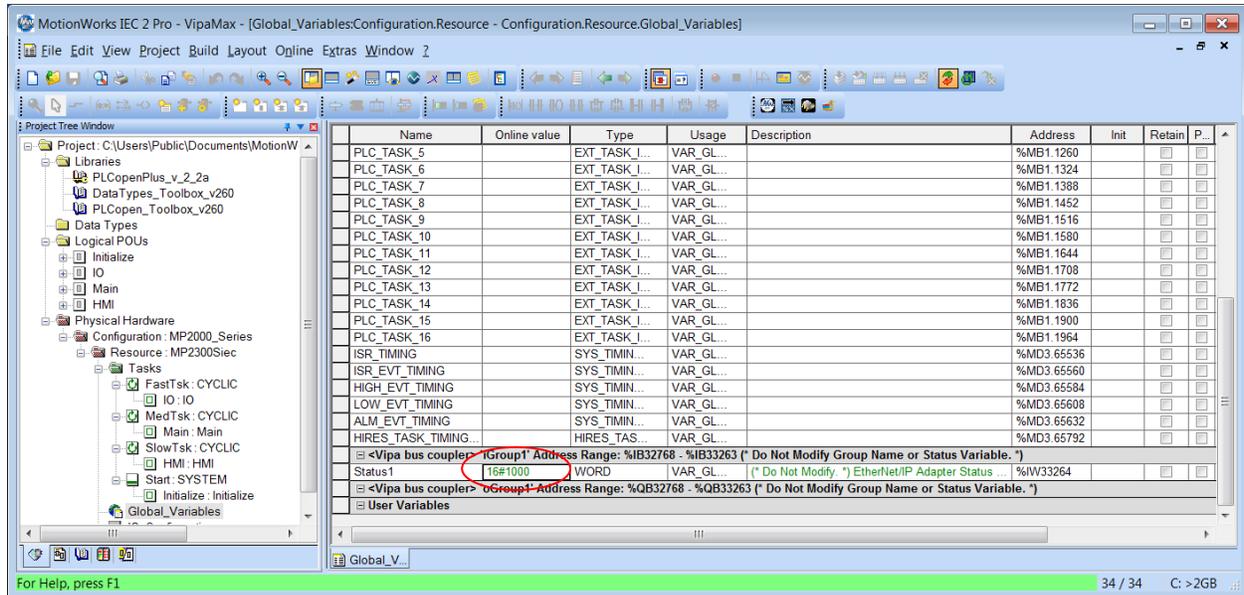


16) Enter the IP address of the VIPA bus coupler in the browser window and navigate to the Parameter tab.



17) Make sure that the options “Always Send Transmit Address” and “Discard a single connection on Timeout” are checked, then click “Save”.

18) When the MPiec controller powers up, the status variable should have a value of 1000 hex indicating that the MPiec controller is connected to the VIPA bus coupler.



19) Notice the IEC address range provided in the group header rows. (32768 to 33263) These are the bytes assigned to the VIPA I/O driver and map to the Bus Couplers I/O. Add variables as needed for each device connected to the bus coupler. Refer to the VIPA documentation for mapping of each analog and digital slice.