

Title: Connecting a Pro-face HMI to an MPiec Controller Using EtherNet/IP

Product(s): MP3200iec, MP2300iec, MP2600iec,
MP3300iec, MotionWorks IEC

Doc. No. AN.MPIEC.14

Application Overview

This application note describes the steps that must be taken to connect a Pro-face HMI to a Yaskawa MPiec controller. More information for these systems can be found at the following links.

Pro-face devices: <http://global.pro-face.com/product/hmi/index.html>

Yaskawa Controllers: <http://www.yaskawa.com/iec>



Required Components

Controller	Yaskawa MPiec Controller Series
Controller Software	MotionWorks IEC Pro v2.0.5.78
HMI	Pro-face HMI AGP3000 to present with EtherNet/IP Port
HMI Driver	ODVA*
HMI Software	GP-Pro EX v4.04

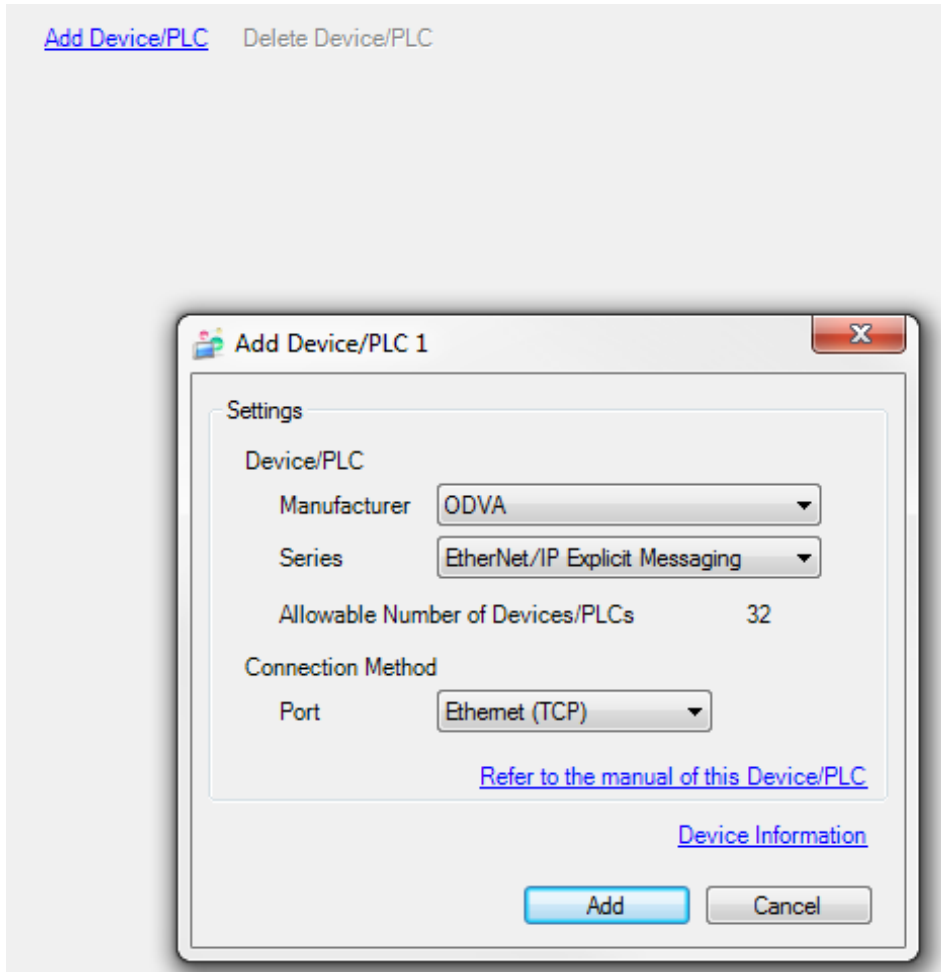
*Note: This driver can be updated if an older version is present.

Title: Connecting a Pro-face HMI to an MPiec Controller Using EtherNet/IP

Product(s): MP3200iec, MP2300iec, MP2600iec,
MP3300iec, MotionWorks IEC

Doc. No. AN.MPIEC.14

1. Launch the Pro-face software, GP-Pro EX and click on “Add Device/PLC” to select the device/driver.



Title: Connecting a Pro-face HMI to an MPiec Controller Using EtherNet/IP

Product(s): MP3200iec, MP2300iec, MP2600iec,
MP3300iec, MotionWorks IEC

Doc. No. AN.MPIEC.14

2. Press the button shown to configure the device.

Device/PLC

[Add Device/PLC](#) [Delete Device/PLC](#)

Device/PLC 1

Summary [Change Device/PLC](#)

Manufacturer Series Port

Text Data Mode [Change](#)

Communication Settings

Port No. Auto

Timeout (sec)

Retry

Wait To Send (ms)

Device-Specific Settings

Allowable Number of Devices/PLCs [Add Device](#) [Increase Allowable Number of Devices/PLCs](#)

Add Indirect Device

No.	Device Name	Settings
1	MP	<input checked="" type="checkbox"/> IP Address=000.000.000.000,Enable Implicit Messagin

3. Set the IP address of the MPiec controller, Select the checkbox for “Enable Implicit Messaging”, and select a USR memory location for the Control Word, Status Word, and Scan Count. Note: USR is an internal memory location in the Pro-face screen.

Individual Device Settings

MP

Configuration [Implicit Messaging](#)

IP Address

Enable Implicit Messaging

Control / Status Address USR

+0 Control Word
+1 Status Word
+2 Scan Count

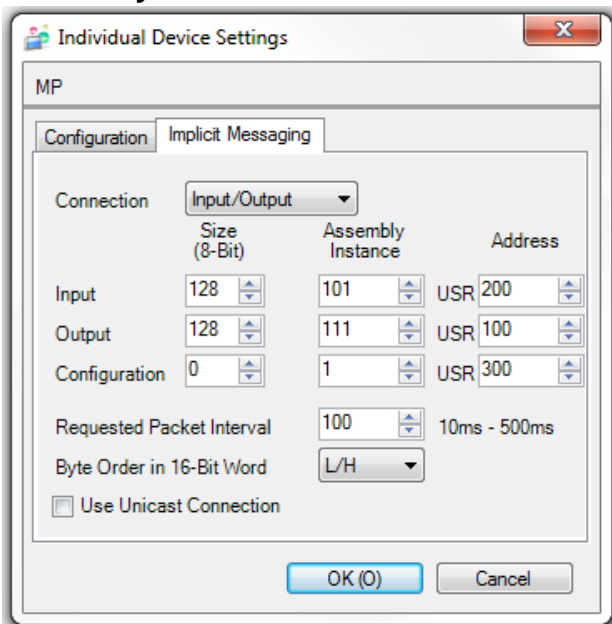
Enable Custom Explicit Message

Title: Connecting a Pro-face HMI to an MPiec Controller Using EtherNet/IP

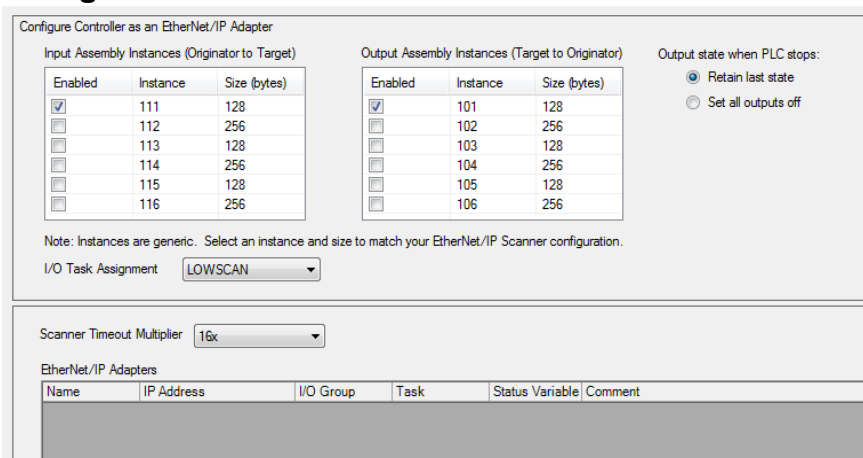
Product(s): MP3200iec, MP2300iec, MP2600iec, MP3300iec, MotionWorks IEC

Doc. No. AN.MPIEC.14

- Configure the Implicit Messaging Size, Assembly Instance, and Address. The USR is where the data will be automatically read and written. This example reflects the MPiec adapter Assembly Instances; however other Assembly Instances could be used.



- In the Hardware Configuration, click on the checkbox to Enable the MPiec controller as an EtherNet/IP Adapter. In this case the Pro-face HMI is configured as the E/IP Scanner.



Title: Connecting a Pro-face HMI to an MPiec Controller Using EtherNet/IP

Product(s): MP3200iec, MP2300iec, MP2600iec,
MP3300iec, MotionWorks IEC

Doc. No. AN.MPIEC.14

6. **Note:** the Pro-face driver setup assigned a memory location for the Control Word. If the Control Word has a value of zero, the Implicit Messaging function will be disabled. To enable the Implicit Messaging, this control word must be set to 1.

