



# ProMix® PD2K CGM Installation Kits

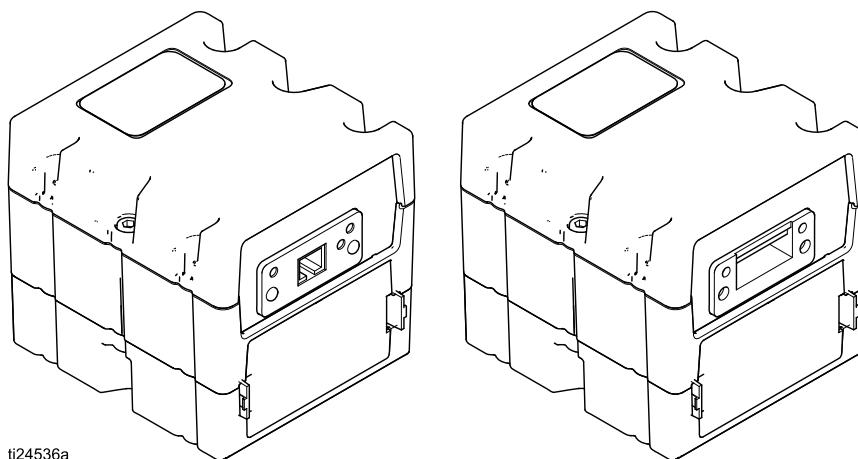
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For use with the ProMix® PD2K to provide FieldBus communication abilities. For professional use only.



## Important Safety Instructions

Read all warnings and instructions in this manual and in your system installation, operation, and repair manuals. Save these instructions.



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# Contents

Related Manuals .....	2	Connect the Cables.....	5
Introduction .....	3	Parts.....	7
Installation.....	4	Appendix A: Graco PD2K Integration with a PLC.....	9
Mount the Module .....	4		

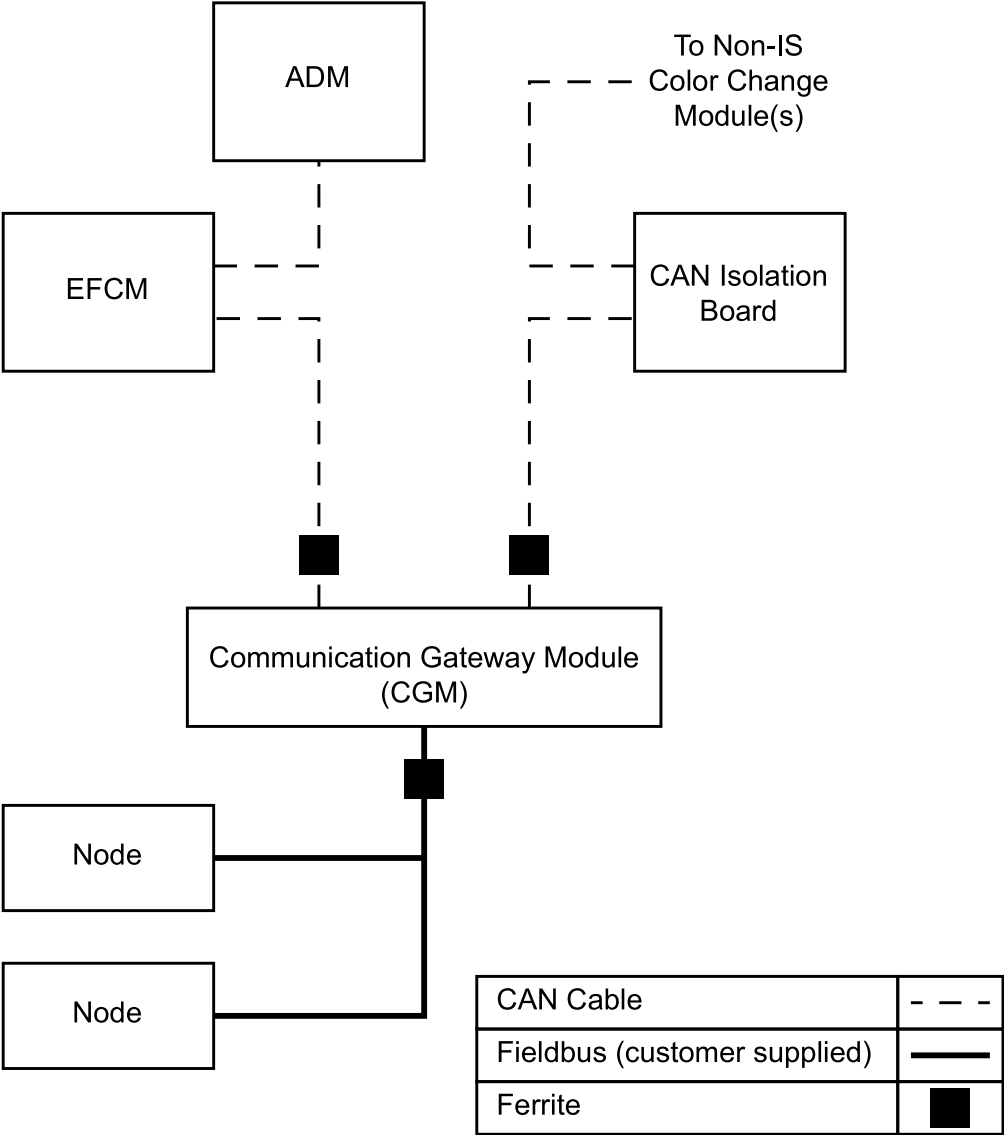
## Related Manuals

Current manuals are available at [www.graco.com](http://www.graco.com).

Manual No.	Description
332458	ProMix PD2K Proportioner for Automatic Spray Applications, Installation
332564	ProMix PD2K Proportioner for Automatic Spray Applications, Operation
332709	ProMix PD2K Proportioner for Automatic Spray Applications, Repair-Parts
3A4486	ProMix PD2K Dual Panel Proportioner for Automatic Spray Applications, Operation
332339	Dosing Pumps, Instructions/Parts
332454	Color/Catalyst Dispense Valves, Instructions/Parts
332455	Color Change Kits, Instructions-Parts
333282	Color Change and Remote Mix Manifold Kits, Instructions-Parts
332456	Pump Expansion Kits, Instructions-Parts

# Introduction

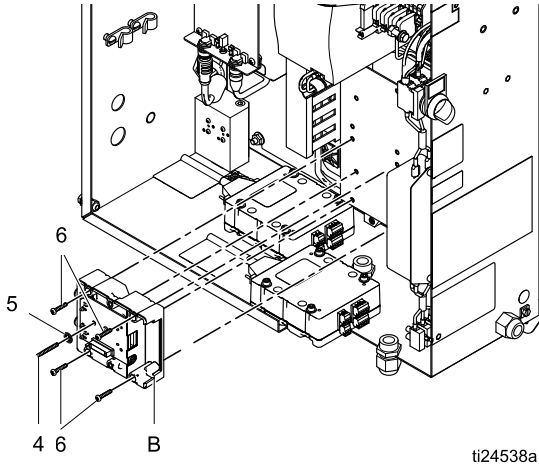
This manual provides instructions for installing a communication gateway module (CGM) in a ProMix® PD2K system. See Manual 334183 for detailed information on the CGM for the Modbus TCP protocol. See Manual 312864 for further information on the CGM for the DeviceNet, EtherNet/IP, and PROFINET protocols. See the ProMix PD2K Operation Manual 332564 or ProMix PD2K Dual Panel Operation Manual 3A4486 for setup details and available internal data.



# Installation

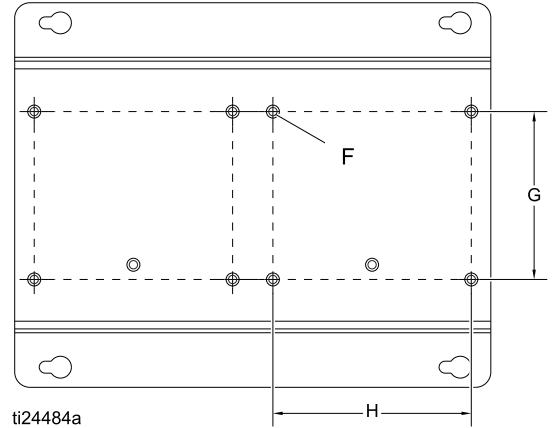
## Mount the Module

1. Remove power from the system.
2. Install the CGM on the mounting bracket in the Electrical Control Box.



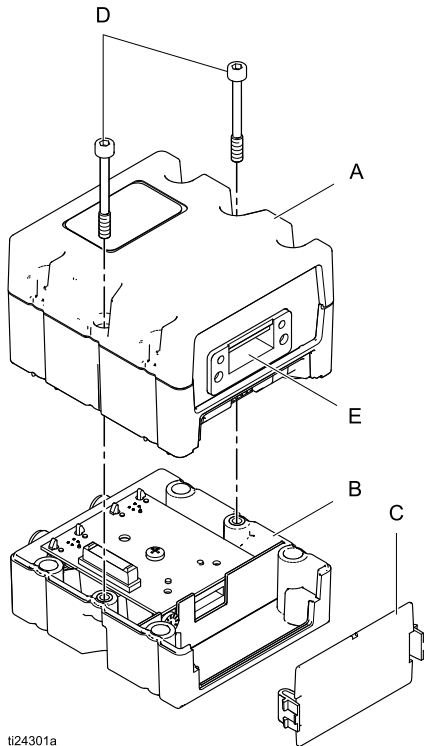
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- b. Use four screws (6) to mount the base (B) to the CGM bracket in the Electrical Control Box. See the following mounting dimensions.



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- a. Remove access cover (C). Loosen two screws (D) and remove CGM (A) from the base (B).



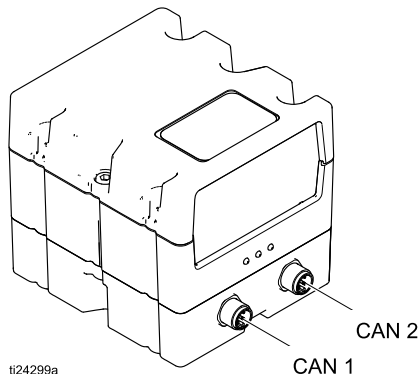
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F	10 x 0.213 in. hole size
G	2.75 in. (70 mm)
H	3.25 in. (83 mm)

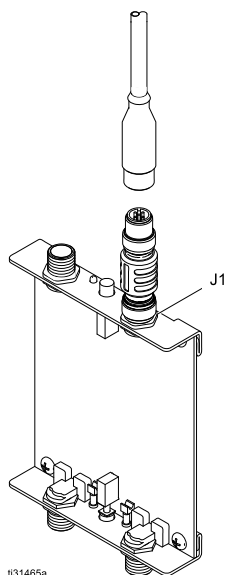
- c. Install the grounding screw (4) and washer (5) and tighten so that the grounding screw threads into the mounting bracket.
- d. Mount the CGM (A) on the base (B) with two screws (D).
- e. Install the access cover (C).

## Connect the Cables

**NOTE:** CAN ports are located on the base of the cube-shaped modules.



1. Disconnect the existing CAN cable from Isolation Board port J1 and connect it to CAN1 of the CGM module.
2. Connect the supplied CAN cable (2) to CAN2 of the CGM module and to port J1 of the Isolation Board.



3. Route both CAN cables through the wire duct adjacent to the left side of the CGM.

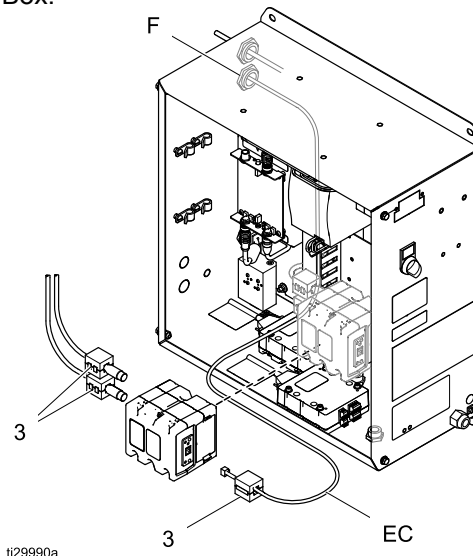
**NOTICE**

To avoid severe damage to the CGM modules, ensure that each CAN cable is connected to the appropriate CAN connection.

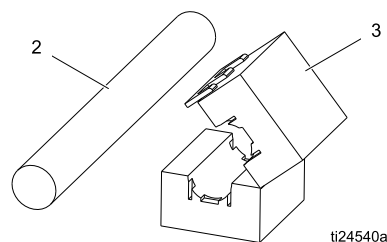
4. If used, connect the ethernet, DeviceNet, or PROFINET cable to the CGM as applicable. Connect the other end of the cable to the FieldBus device.

**NOTE:** Connect the CGM to the FieldBus per FieldBus standards. The Ethernet and Modbus TCP interface operate at 100Mbit, full duplex. The interface is auto polarity sensing and auto-crossover capable.

- a. Locate fitting (F) on the Electrical Control Box.

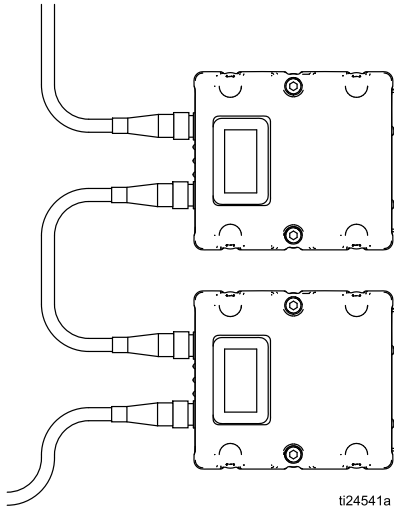


- b. Disconnect the CAN cable from Isolation Board J4.
  - c. Remove the nut on fitting (F).
  - d. Remove the fitting far enough to allow disassembly of the fitting and to open the grommet.
  - e. Route FieldBus cable (EC) through the left wireway up to the grommet. Ensure that the ethernet cable is inserted with enough length to allow for routing within the box and for connection to the CGM.
  - f. Insert the FieldBus cable into the grommet and insert the grommet into the fitting.
  - g. Insert the fitting through the Electrical Control Box wall and install the nut. Tighten finger tight.
  - h. Attach the CAN cable to Isolation Board J4.
  - i. Attach a ferrite (3) near the end of the FieldBus cable.
  - j. Attach the FieldBus cable to the CGM.
5. Connect ferrites (3) on CAN cables, adjacent to the CGM.

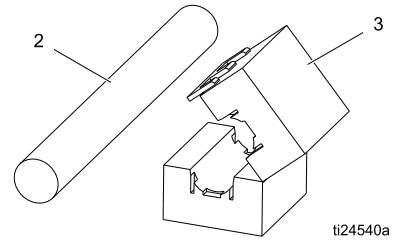


### To Connect a Second Module

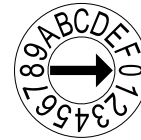
1. Install the new module (see [Mount the Module, page 4](#)).
2. Disconnect the cable from CAN 1 on the first module. Connect it to CAN 1 on the newly installed second module.
3. Connect the supplied CAN cable (2) to CAN 1 on the first module and to CAN 2 on the newly installed second module.



4. Connect ethernet, DeviceNet, or PROFINET, if used. (See step 4 of [Connect the Cables, page 5](#).)
5. Connect ferrites (3) on CAN cables, adjacent to the CGM.



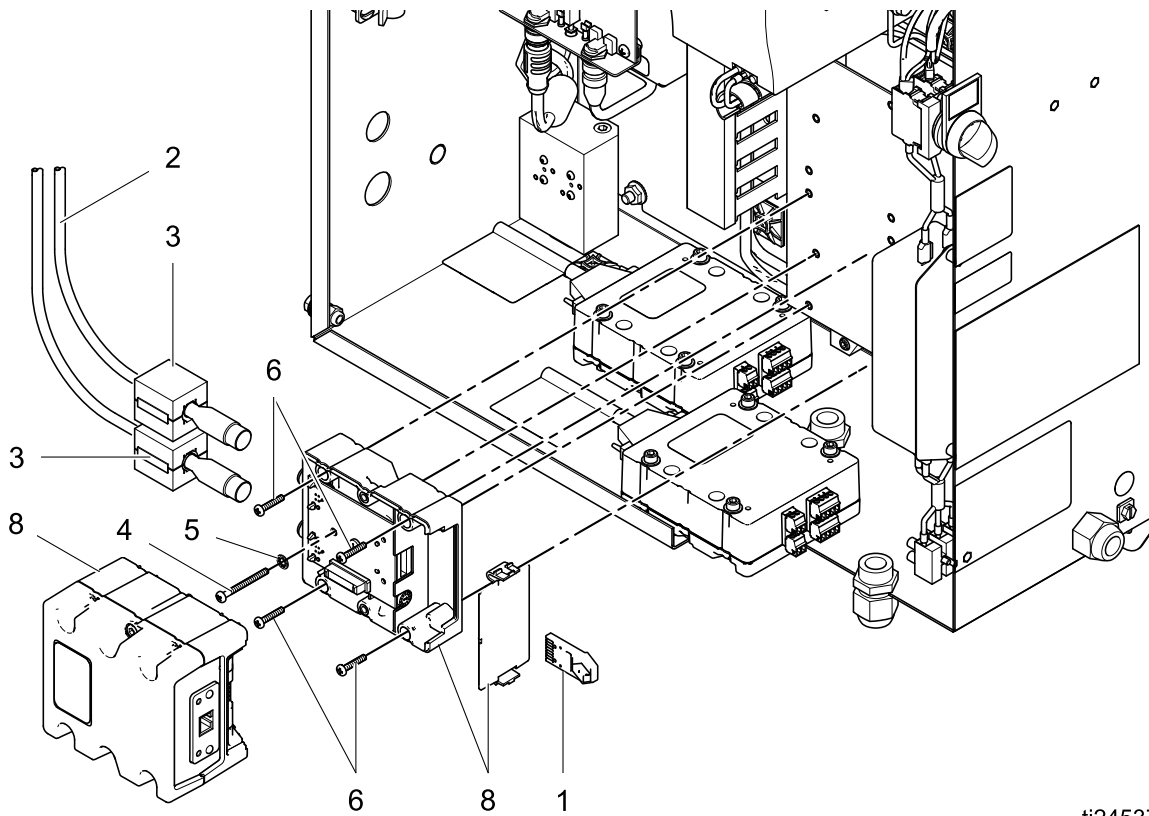
**NOTE:** If both modules are Modbus TCP, the rotary switch on one must be set at position "0" and the other should be set to position "1".



#### NOTICE

To avoid severe damage to the CGM modules, ensure that each CAN cable is connected to the appropriate CAN connection.

# Parts



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**Kit 24W829 ProMix PD**  
**Kit 26A303 ProMix PD Dual Mix**  
**Kit 25D997 ProMix PD Dual Mix with ProfiNet**  
**Kit 26C284 ProMix PD3K+**

Ref	Part	Description	Qty
1	17C087	TOKEN, map, for ProMix PD only	1
	17N995	TOKEN, map, for ProMix PD Dual Mix only	1
	17W599	TOKEN, map, for ProMix PD3K+ only	1
2	121227	CABLE, CAN, female/female, 0.6m	1
3	121901	SUPPRESSOR, box snap, ferrite	2
4	123286	SCREW, machine, #6-32 x 1.5 in.	1
5	100272	WASHER	1
6	113964	SCREW, pan head, #6-32 x 0.75 in.	4
8 *		MODULE, Communications Gateway	1
	CGMDNO	DeviceNet	
	CGMEPO	EtherNet/IP	
	CGMPNO	PROFINET	
	24W462	Modbus TCP	

\* Included in kit 25D997. Not included in kit 24W829, 26A303, or 26C284. See Manual 312864 for parts list for CGMxxx models. See Manual 334183 for parts list for 24W462.

Parts

**Notes**

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# Appendix A: Graco PD2K Integration with a PLC

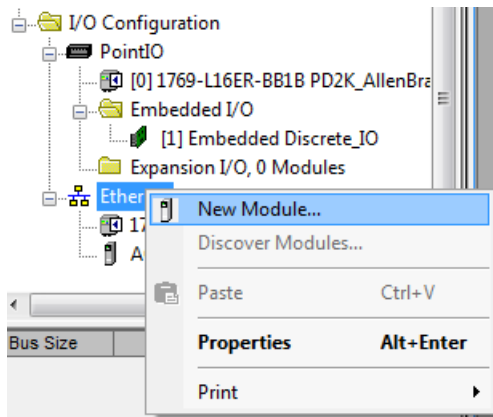
## Allen Bradley PLC

This appendix outlines how to integrate a ProMix PD2K with an Allen Bradley Studio 5000 Programmable Logic Controller (PLC).

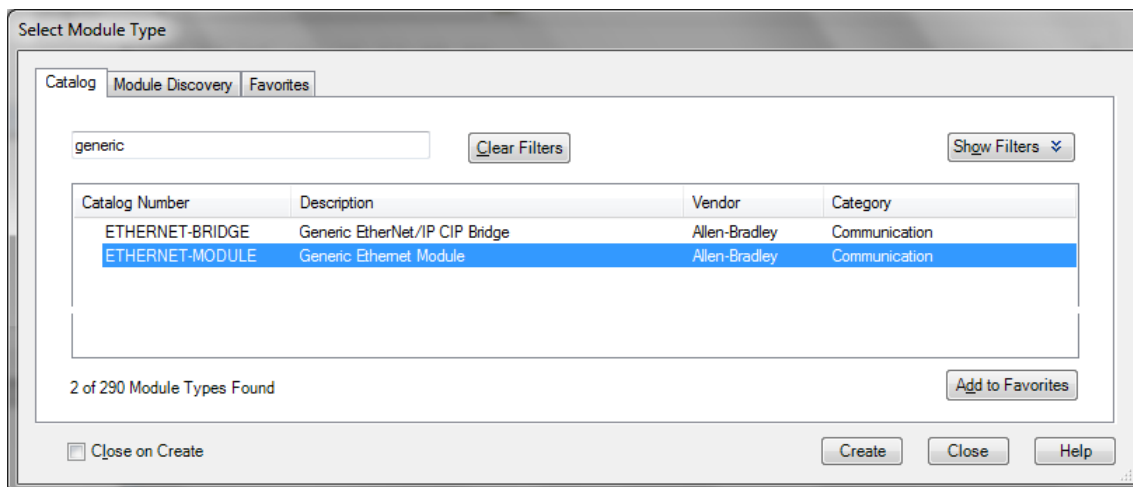
To integrate, the ProMix PD2K must have the Ethernet/IP protocol for PLC CGM (Graco Part number CGMEPO) installed prior to performing this procedure.

In the PLC software, perform the following steps:

1. Add the new Ethernet module. Right-click and select **New Module**.

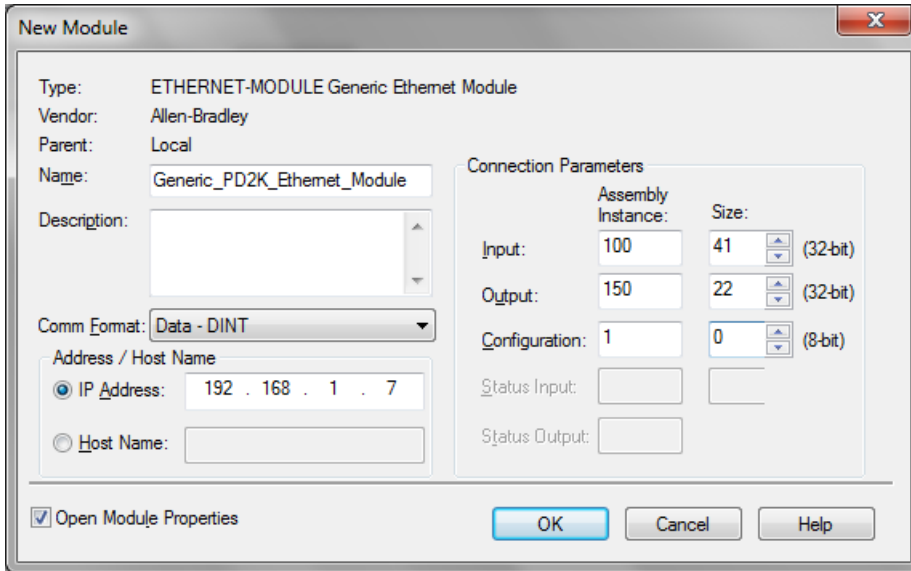


2. On the **Select Module Type** screen, do the following:



- a. In the search field, type **generic**.
- b. Select **ETHERNET-MODULE Generic Ethernet Module**.  
**NOTE:** Do not select the Close on Create checkbox.
- c. Click **Create**.

3. On the **New Module** screen, configure the module by defining the fields as follows:

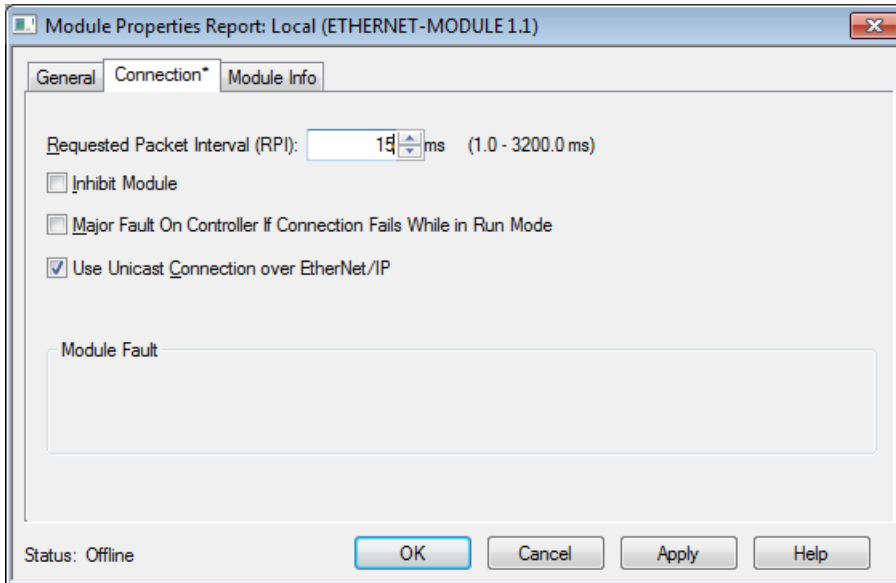


**NOTE:** The **Open Module Properties** checkbox must remain selected so that the configuration can be completed after completing this screen.

Field	Required?	Input
<b>Name</b>	Yes	Enter a name for the module. The name appears in the Ethernet directory shown by the figure in step 1.
<b>Description</b>	No	Use any description desired.
<b>IP Address</b>	Yes	Enter the static IP address of the Graco EtherNet/IP CGM installed in the system.
<b>Input Assembly Instance</b>	Yes	Enter <b>100</b> , which is a device-specific parameter for the Graco EtherNet/IP CGM.
<b>Input Size</b>	Yes	Enter the number of 32-bit registers that are allocated for input variables in the Graco EtherNet/IP CGM. <ul style="list-style-type: none"> <li>• For ProMix PD systems, enter <b>41</b>.</li> <li>• For ProMix PD2K Dual Panel systems, enter <b>62</b>.</li> <li>• For ProMix PD3K+ systems, enter <b>46</b>.</li> </ul>
<b>Output Assembly Instance</b>	Yes	Enter <b>150</b> , which is the device-specific parameter for the Graco EtherNet/IP CGM.
<b>Output Size</b>	Yes	Enter the number of 32-bit registers that are allocated for output variables in the Graco EtherNet/IP CGM. <ul style="list-style-type: none"> <li>• For ProMix PD systems, enter <b>22</b>.</li> <li>• For ProMix PD2K Dual Panel systems, enter <b>30</b>.</li> <li>• For ProMix PD3K+ systems, enter <b>18</b>.</li> </ul>
<b>Configuration Assembly Instance</b>	Yes	Enter <b>1</b> .
<b>Configuration Size</b>	Yes	Enter <b>0</b> .

4. Click **OK**.

5. On the **Module Properties Report** window, on the **Connection** tab, do the following:



- a. In the **Requested Packet Interval (RPI)** field, enter the interval value.  
For ProMix PD systems, enter a value of **30** ms or more.  
For ProMixPD Dual Mix and ProMix PD3K+ systems, enter a value of **50** ms or more.
- b. Select checkboxes as needed.
- c. Click **OK** to save all changes and exit this screen.  
**NOTE:** An asterisk appears after the tab heading if unsaved changes are present. Click **Apply** to save changes without exiting this screen.

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Original Instructions. This manual contains English. MM 334494

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