

Standard Solutions

G3 Ethernet IP Commissioning

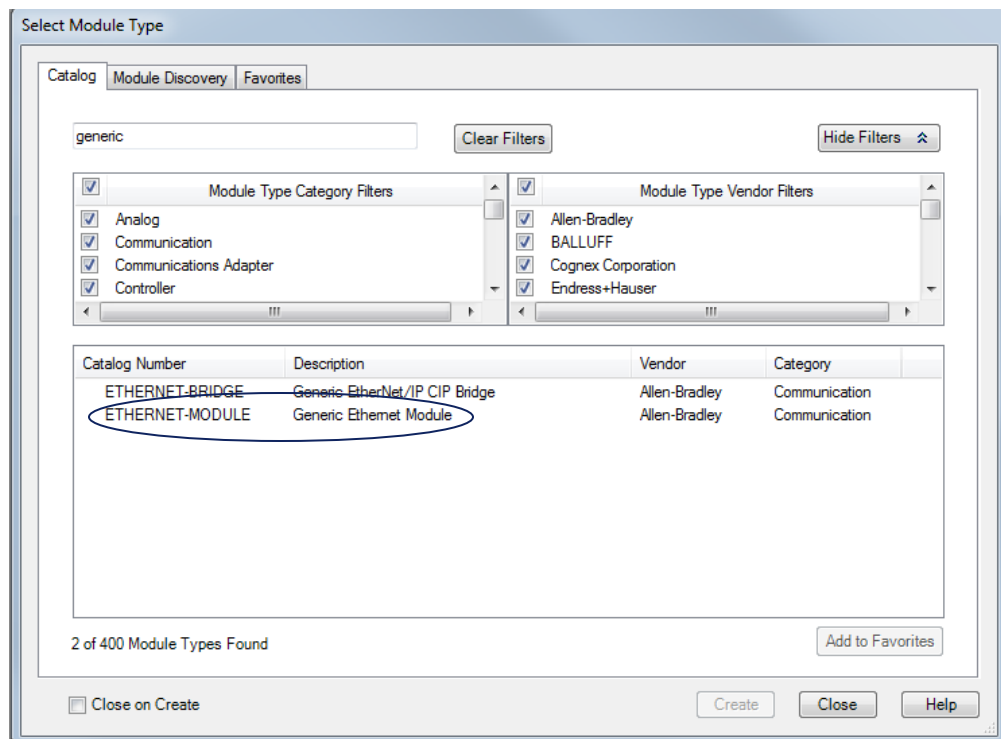
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G3 Ethernet IP Commissioning

Applies to 580 and G3 EtherNet/IP

1. Instructions to setup communication with a Rockwell PLC using RS Logix 5000
2. Start by opening RS Logix 5000 and creating a new module
3. Select the “Generic Ethernet Module”



G3 Ethernet IP Commissioning

Enter the required parameter data including;
Name, Connection Parameters, IP Address
and Comm. Format

The screenshot shows a 'New Module' dialog box with the following fields and values:

- Type: ETHERNET-MODULE Generic Ethernet Module
- Vendor: Allen-Bradley
- Parent: LocalENB
- Name: Numatics_G3_Ethernet_IP
- Description: (empty text box)
- Comm Format: Data - DINT (selected from dropdown)
- Address / Host Name:
 - ☒ IP Address: 192 . 168 . 1 . 120
 - ☐ Host Name: (empty text box)
- Connection Parameters:

	Assembly Instance:	Size:	
Input:	100	10	(32-bit)
Output:	150	10	(32-bit)
Configuration:	1	0	(8-bit)
Status Input:	(empty)	(empty)	
Status Output:	(empty)	(empty)	

At the bottom, there is a checkbox for 'Open Module Properties' which is checked, and three buttons: 'OK', 'Cancel', and 'Help'.

G3 Ethernet IP Commissioning

Generic Ethernet Module Parameters

RS ~~Logix~~ 5000 uses the connection parameter to configure communication to the G3.

The comm. format parameters are used to create the G3 data table within the Rockwell PLC controller tag data.

Comm. Format

The “Comm Format” determines the format of the data exchanged with the G3 EtherNet/IP™ node.

<i>Description</i>	<i>Data</i>	<i>Description</i>
Comm. Format	Data – DINT	Double Integer 32 Bits
	Data – INT	Integer 16 Bits
	Data – SINT	Single Integer 8 Bit

Assembly Instance Values

The following Assembly Instance parameters must used with the G3 EtherNet/IP™ module.

<i>Description</i>	<i>Assembly Instance Values</i>	<i>Size (depends on data format)</i>
Input	100 (Decimal)	Total input value from the physical manifold configuration. This is a minimum value. Larger values may be specified for future expansion purposes.
Output	150 (Decimal)	Total output value from the physical manifold configuration. This is a minimum value. Larger values may be specified for future expansion purposes.
Configuration	1 (Decimal)	0

G3 Ethernet IP Commissioning

General Tab

Enter the required parameter data including;

Name, Connection Parameters, IP Address and Comm. Format

Assign a name to the manifold configuration

Enter the G3 Ethernet IP Address

Set the Input instance to 100
Enter number of Inputs data blocks

Set the Input instance to 150
Enter number of Output data blocks

Set the Configuration instance to 0
Set the Configuration size to 0

G3 Ethernet IP Commissioning

Connection Tab

Enter the required parameter data including;

RPI Value, Unicast

Select Unicast

The screenshot shows a Windows-style dialog box titled "Module Properties Report: Local (ETHERNET-MODULE 1.1)". It has three tabs: "General", "Connection", and "Module Info". The "Connection" tab is selected. Inside the tab, there is a "Requested Packet Interval (RPI):" label followed by a text box containing "20.0" and a unit "ms" with a range "(1.0 - 3200.0 ms)". Below this are three checkboxes: "Inhibit Module", "Major Fault On Controller If Connection Fails While in Run Mode", and "Use Unicast Connection over EtherNet/IP". An arrow points from the text "Select Unicast" to the "Use Unicast Connection over EtherNet/IP" checkbox. At the bottom of the dialog, there is a "Module Fault" text box and a "Status: Offline" label. On the right side of the bottom are four buttons: "OK", "Cancel", "Apply", and "Help".