

Quick Start Guide

MMI-20019807, Rev. AB

July 2012

Micro Motion[®] EtherNet/IP Module

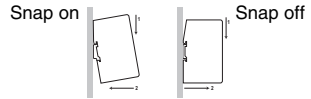
Installation

Components

- Micro Motion[®] EtherNet/IP Module
- Micro Motion EtherNet/IP Resource CD (*Micro Motion EtherNet/IP Module User Manual*, EDS file, Micro Motion Ethernet Config Tool)
- Power connector
- Configuration cable
- Modbus serial cable and connector (included)
- Ethernet cable and connector (not included)

Installation and startup summary

1. Mount the transmitter, and wire it to the sensor and to power. (If you are using a Micro Motion MVD Direct Connect flowmeter, mount and wire the core processor and barrier.)
2. Power up the flowmeter, set its Modbus address to 1, and configure its RS-485 terminals as follows: Modbus RTU, 38400 baud, 2 stop bits, no parity. If your device supports the auto-detect feature, only the Modbus address is required.
3. Mount the EtherNet/IP Module on the DIN rail.
4. Wire the EtherNet/IP Module to power (24 VDC).
5. Install the Modbus serial cable between the EtherNet/IP Module and the RS-485 terminals on the transmitter (or the barrier, if present).
6. Set the configuration dip switches on the EtherNet/IP module as follows: Switches 1–7: **Off**; Switch 8: **On**. This sets the IP address to **192.168.0.1**.
7. Power up the EtherNet/IP Module. At this point, the module will attempt to make a Modbus connection to the transmitter. If the Subnet Status LED (LED 5) is green, continue. If it is not green, see the LED Indicators table on page 2.
8. Set the network settings for the EtherNet/IP Module.
 - a. Change the Ethernet address for your PC so that it is on the same subnet as the device. When prompted, enter the following:
 - IP address: **192.168.0.x**, where *x* is something other than 1
 - Subnet mask: **255.255.255.0**
 - b. Disable the popup blocker on your web browser.
 - c. Use a crossover cable (or a standard cable with a switch) and your web browser to connect to the device, using the IP address assigned in Step 6: **192.168.0.1**.
 - d. At the login screen, log in as user *admin*. The default password is *admin*. Ignore the auto-configuration popup window.
 - e. On the Network Settings page, change the settings to the desired values and close the web browser.
 - f. At the EtherNet/IP Module, set all dip switches to **Off**.
 - g. Cycle power to the EtherNet/IP Module.



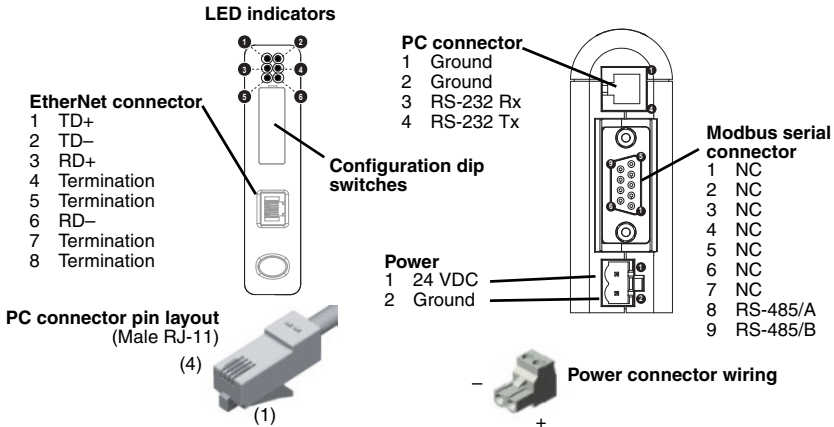
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9. Connect the EtherNet/IP Module to the Ethernet network. **IMPORTANT:** Wait for the auto-configuration process to complete. This is required to set up device memory.
10. Add the EtherNet/IP Module to the Ethernet network control system. See page 4 for an example of the RSLogix setup window.

For more detailed instructions, see the transmitter installation manual or the manual entitled *Micro Motion EtherNet/IP Module: User Manual*. Special setups for concentration measurement and petroleum measurement are available.

Connections, switches, and indicators



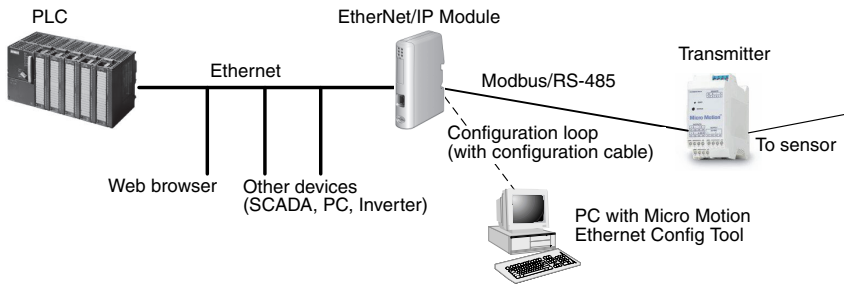
LED indicators

LED Number/Name	Status	Meaning		
EtherNet 1	Module Status	Off	No power applied to the module.	
		Solid green	The module is operating correctly.	
		Flashing green	Standby; the module has not been initialized.	
		Flashing red	Minor fault. The module may or may not be able to recover.	
		Solid red	Major fault. No recovery is possible. The module must be returned to Micro Motion for repair. See the manual for the return policy.	
		Flashing green/red	Self-test.	
EtherNet 2	Network Status	Off	The module has not power or no IP address has been assigned.	
		Solid green	The module has at least one established EtherNet/IP connection.	
		Flashing green	There are no EtherNet/IP connections established to the module.	
		Flashing red	One or more of the connections to this module has timed out.	
		Solid red	The module has detected that its IP address is already in use.	
EtherNet 3	Link	Off	The module does not sense a link.	
		Green	The module is connected to an Ethernet network.	
Modbus Serial 4	Activity	Flashing green	Packet is received or transmitted.	
	Modbus Serial 5	Subnet Status	Off	Power off.
			Flashing green	Running correctly, but one or more transaction errors has occurred.
			Green	Running.
			Red	Transaction error/timeout or network stopped. Check the Modbus serial network wiring and configuration, especially the baud.
			Flashing red	Missed transactions.
Modbus Serial 6	Device Status	Off	Power off.	
		Flashing red/green	Configuration missing or invalid.	
		Red	Contact Micro Motion customer service.	
		Flashing red	Contact Micro Motion customer service.	
		Green	Initializing.	
	Flashing green	Configuration OK.		

Functional overview

The EtherNet/IP Module acts as a gateway between the serial output of a Micro Motion device and an EtherNet/IP network. It supports process monitoring and control, and configuration and administration from your web browser.

The EtherNet/IP Module is a Modbus master and an Ethernet slave. On the Modbus side, it polls the transmitter for a standard set of process variables and stores the data locally. On the Ethernet side, it receives requests for data and responds with the current values.



In this illustration:

- The transmitter shown is a Model 1500 or Model 2500. See the EtherNet/IP Module Product Data Sheet for a list of all supported transmitters. All sensor connections are supported (integral, 4-wire, 9-wire). Micro Motion MVD Direct Connect flowmeters are also supported.
- The web browser is used for transmitter configuration and administration, via a connection to the Micro Motion web pages on the EtherNet/IP Module.
- The configuration loop is used only by the Micro Motion Ethernet Config Tool. In typical installations, this tool is not needed.

For more information

The Micro Motion EtherNet/IP Module is a customization of the Anybus[®] Communicator[™] from HMS Industrial Networks.

- For detailed information about the Micro Motion customization, for more detailed installation instructions, and for information about concentration measurement and petroleum measurement options, see the manual entitled *Micro Motion EtherNet/IP Module: User Manual*.
- For detailed information about the transmitter, see the transmitter documentation.
- For detailed information about the Anybus Communicator, see the manual entitled *Anybus Communicator User Manual*, available on the HMS web site.

Generic EtherNet/IP Module configuration in RSLogix

New Module

Type: ETHERNET-MODULE Generic Ethernet Module
 Vendor: Allen-Bradley
 Parent: LocalENB
 Name: MicroMotion_EIP
 Description: Micro Motion EtherNet/IP Module Basic Configuration
 Comm Format: Data - INT
 Address / Host Name
 IP Address: 10 . 129 . 170 . 165
 Host Name:
 Open Module Properties

Connection Parameters

	Assembly Instance:	Size:	
Input:	100	20	(16-bit)
Output:	150	7	(16-bit)
Configuration:	3	0	(8-bit)
Status Input:			
Status Output:			

OK Cancel Help

Note: If Comm Format is set to anything other than INT, the data sizes will be different from those shown. This illustration shows the standard configuration for the EtherNet/IP Module. For concentration measurement and petroleum measurement, different I/O settings are required. Detailed information is provided in the manual.

Micro Motion customer service

Location	Telephone number	
U.S.A.	800-522-MASS (800-522-6277) (toll free)	
Canada and Latin America	+1 303-527-5200 (U.S.A.)	
Asia	Japan	3 5769-6803
	All other locations	+65 6777-8211 (Singapore)
Europe	U.K.	0870 240 1978 (toll-free)
	All other locations	+31 (0) 318 495 555 (The Netherlands)

Email: flow.support@emerson.com

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