

# Answers@Acromag

## New Feature Announcement

### Ethernet i2o™ direct input-to-output communication

#### Introducing the easiest way to link your inputs to your outputs without a PLC, PC or master CPU

Many BusWorks® 900EN I/O modules now have the ability to operate like a long-distance transmitter. Convert your sensor inputs at Point A to process control signals at Point B. Or, monitor a discrete device at one site by reproducing the discrete level with a relay output at another location.

#### Use your existing Ethernet lines to save time and wiring expenses

You can connect the input modules to the output modules using your existing copper/fiber infrastructure or with a single new cable. Multiple I/O modules can be multiplexed through a switch or wireless radios.

#### No complicated controllers. No software. No programming.

Acromag's Ethernet I/O modules have a built-in web page making it simple to configure using your standard web browser. Just click a few menu settings, enter the IP addresses, and you are done. Fast and easy.



BusWorks 900EN Series I/O Modules

#### Up to 12 channels per module and reliable, failsafe communication

Monitor up to a dozen devices with a single pair of I/O modules. Discrete I/O modules have twelve channels that you can set up as inputs or as outputs in four-channel groups. This allows bi-directional communication between two modules. Analog input modules measure up to six current, voltage, thermocouple, or RTD sensor signals. This data is then transmitted to a six-channel analog output module providing DC current or voltage output signals.

#### Wire-saving applications

Our i2o technology lets an input module speak directly to an output module. It is ideal for non-critical projects that don't need a PLC or PC master. Reproduce remote signals based on timed or event updates.

- Remote monitoring of process variables (temperature, pressure, level, flow) and discrete devices
- Remote data display, recording, alarms, or control
- Signal splitters
- Analyzer system monitoring
- Power and water utility monitoring
- Tank level, pump, and valve control
- Remote monitoring of motor loads and contactor status
- Remote control switching stations
- Environmental control systems
- Process shutdown, alarming, and annunciator systems
- RFID systems

**Analog Inputs (6)**  
4-20mA,  
0-10V DC,  
thermocouple,  
RTD/resistance

**Discrete Inputs (12)**  
on/off,  
high/low,  
open/close,  
momentary  
push-buttons

**Any Ethernet Media**  
Copper, fiber, or  
wireless radios

**Analog Outputs (6)**  
proportional  
4-20mA or  
0-10V DC

**Discrete Outputs (12)**  
on/off,  
high/low,  
open/close



More information on reverse side. >>>>

# Ethernet i2o communication

## 900EN Series Modules with i2o

### Analog Input Modules

- 961EN-4006  
6 differential current inputs
- 962EN-4006  
6 differential voltage inputs
- 965EN-4006  
6 thermocouple/mV inputs

- 966EN-4006  
6 RTD/resistance inputs

### Analog Output Modules

- 972EN-4004/4006  
4 or 6 current outputs
- 973EN-4004/4006  
4 or 6 voltage outputs

### Discrete I/O Modules

- 982EN-4012  
12 solid-state relay outputs
- 983EN-4012  
12 solid-state input/outputs

### Combo Modules

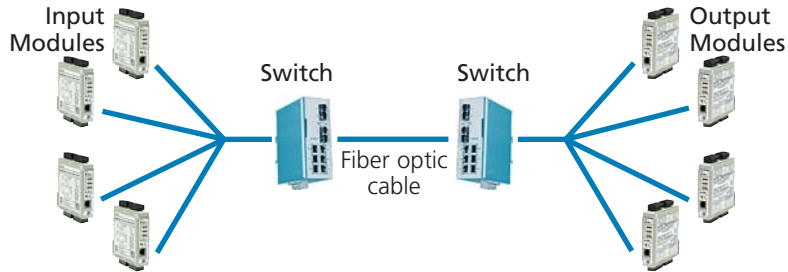
- 951EN-4012, 952EN-4012  
4 analog inputs, 2 analog outputs, 6 discrete I/O

### Installation #1: Copper Ethernet network

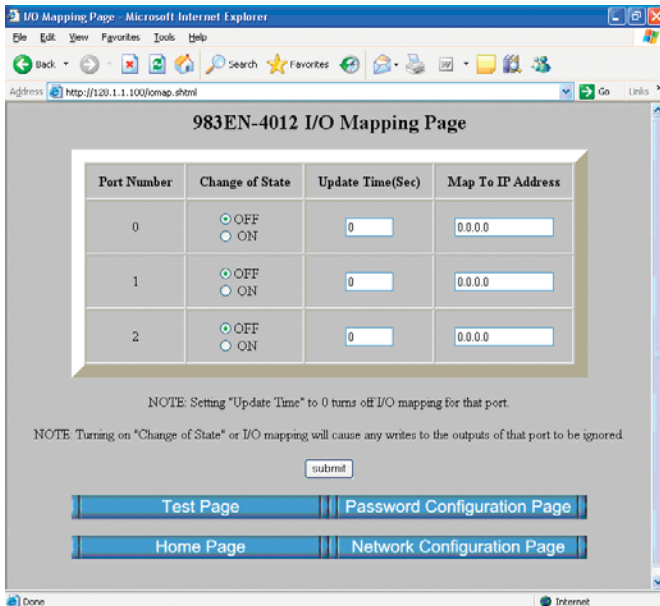
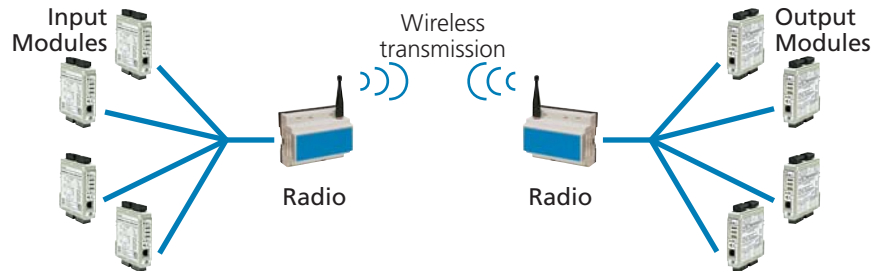


NOTE: Buy modules in pairs. For example:  
AI with AO  
DIO with DO or DIO  
Combo with Combo

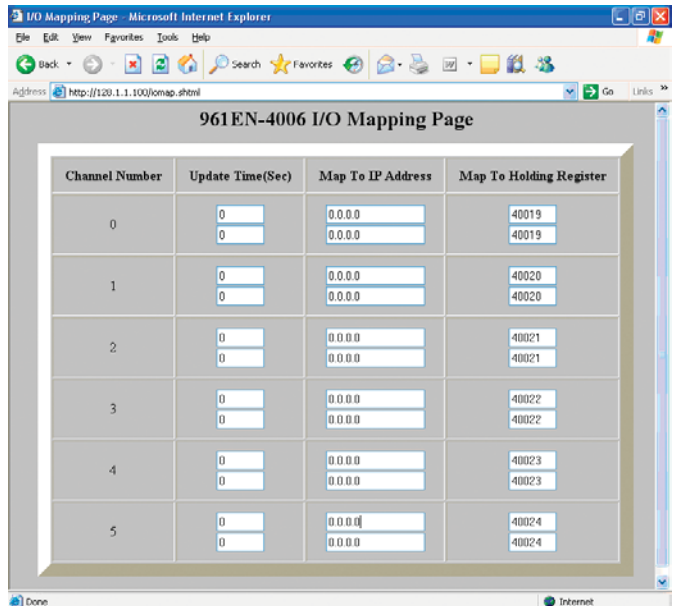
### Installation #2: Fiber optic connection



### Installation #3: Wireless connection (telemetry systems)



Discrete I/O Module configuration screen



Analog Input Module configuration screen