



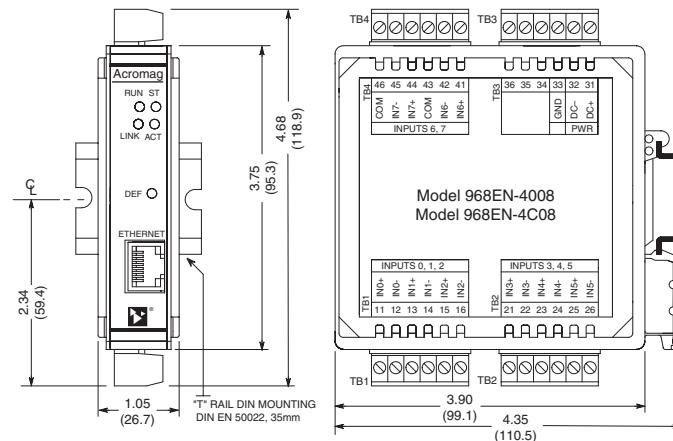
# Ethernet I/O: BusWorks® Series

## 968EN Ethernet Analog Input Modules

**RoHS**  
Compliant



24 HOUR STOCK ITEM  
2 YEAR WARRANTY



Standard model includes cage clamp terminal blocks.  
Optional terminals are available.

**Modbus/TCP**  
conformance tested

8-channel Differential Analog Voltage Input ◆ Modbus TCP/IP, i2o® Peer-to-peer Communication

### Description

#### Models

968EN-4008: Industrial-grade units

968EN-4C08: Commercial-grade units

These modules interface high-level analog input signals to an Ethernet network. A high-performance design ensures reliable measurements and dependable operation.

Industrial-grade models add a configurable integrator/totalizer plus superior accuracy and temperature performance compared to the economical commercial-grade version.

#### Input Ranges

±5V, ±10V DC (selectable on each channel)

#### Ethernet Communication

Modbus TCP/IP, 10/100Base-T(X),  
i2o peer-to-peer

#### Power Requirement

18 to 36V DC, 2.4W

#### Approvals

CE, UL/cUL (industrial-grade units only)  
Zone 2, Class 1, Division 2, ABCD

### Key Features & Benefits

- High-resolution 16-bit A/D
- Fast scanning of all channels in 8ms
- 3-way isolation and surge suppression
- Peer-to-peer i2o communication with percent-of-span or timed-based updates
- Configurable integration/totalization function with non-volatile registers
- Dual-format 16/32-bit data registers
- Scaling registers on all channels
- Configurable sample averaging
- Automatic calibration and self-test
- User-adjustable TCP Ports 1-99,999 for advanced network configuration
- Web browser configuration with copy utility for fast setup

### i2o® Peer-to-peer Messaging

With Acromag's i2o technology, you can map each input channel to any output channel on a 97xEN-400x output unit. Select updates based on time or on a percent of range change (100mS or 0.1% resolution).

### Performance Specifications

#### Accuracy

968EN-4008: Less than 0.05% of range

968EN-4C08: Less than 0.10% of range

#### Input Impedance

4M ohms

#### Operating Temperature and Humidity Ranges

968EN-4008: -40 to 70°C (-40 to 158°F)

968EN-4C08: 0 to 55°C (32 to 131°F)

Relative humidity: 5 to 95%, non-condensing

#### Isolation

3-way isolation of I/O, power, network circuits.

Peak: 1500V AC, ANSI/ISA-82.01-1988

Continuous: 250V AC, 354V DC

### Ordering Information

#### ◆ I/O Modules

**968EN-4008** {industrial-grade}  
8-ch voltage input module with integrator

**968EN-4C08** {commercial-grade\*}  
8-ch voltage input module

\* CE approval only, no integrator function

#### ◆ Accessories

[Industrial Ethernet Switches](#)

[Hardware Accessories and Power Supplies](#)

[Software Support](#)

**Acromag**   
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