

## Features

- TCP/IP port
- 4-ch SPDT Relay
- 12-ch SPST Relay
- 8-ch Analog Input
- 2-ch are defined as Current
- 16-ch Isolated Digital Input
- 2-ch Event Counting option
- Digital Filter on all Digital Inputs
- Auto Report on input change
- Onboard watchdog protection
- High noise immunity
- Din-Rail mounting ready

## Introduction

The IA-3146-EA8-P is a TCP/IP port Multifunction Controller that includes Relays, Isolated Digital Inputs, Analog Inputs, Event Counters, Digital Filter, Auto Report on input change facility and more.

The Analog Inputs are based on an accurate 12bit converting system that includes 3 unipolar Voltage ranges and a standard 4-20mA Current range applicable on two channels.

The Digital Inputs are Optically Isolated with an optional internal power source. As such, they support “Dry-Contact” and TTL inputs with a current input of 1.5mA. Externally powered option is supported too, with a voltage range of +/-4 to +/-30VDC. The inputs are divided into two groups, while each group may be set individually to internal or external power source.

The IA-3146-EA8-P includes two kinds of relays. 4 SPDT relays and 12 SPST relays. All N.O. contacts are rated at 5Amp while the N.C. contacts are rated at 3Amp.

All relays are Voltage Protected by Voltage Suppressors placed across each N.O. contact, in order to protect the relay contacts, to minimize the EMI/RFI switching noise and to significantly increase the products life time.

The Event Counters inputs shares the last two Digital Inputs, offering the user a choice of Digital Input Monitoring or Event Counting use.

Microsoft DOT.net Library, Open Source code examples and operation utilities are being attached to each card, to simplify and shorten its software implementation time.

The IA-3146-EA8-P makes an excellent tool for Web monitoring and control of Factory Floor, Machines, Environment control systems and Home control.

## Specifications

### Communication

<b>Ethernet</b>	
LAN	10/100 Base-T
Protocol	TCP/IP DHCP and Static
Default IP	10.1.1.22
Default Port	23
Connector	RJ45
<b>Serial Port</b>	
Baud Rate Range	1200 – 115200
Default Settings	19200, 8, n, 1
Flow Control	None
Connector	DB9 Male

### Ordering Information

<b>IA-3146-EA8-P</b>	TCP/IP Ethernet Controller 16 Relays, 16 Digital Inputs 8 Analog Inputs RJ45 cable 1.5m
<b>IA-3116-EsP</b>	TCP/IP Ethernet Controller 16 Relays, 16 Digital Inputs RJ45 cable 1.5m
<b>IA-3116-U2isP</b>	USB or RS-232 Controller 16 Relays, 16 Digital Inputs USB cable 1.8m

### Relays

SPDT					
Channels	<b>4</b>				
Contact Rating	<table border="1"> <tr> <td>N.O.</td><td>5Amp @ 30VDC 5Amp @ 250VAC</td></tr> <tr> <td>N.C.</td><td>3Amp @ 30VDC 3Amp @ 250VAC</td></tr> </table>	N.O.	5Amp @ 30VDC 5Amp @ 250VAC	N.C.	3Amp @ 30VDC 3Amp @ 250VAC
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N.C.	3Amp @ 30VDC 3Amp @ 250VAC				
SPST					
Channels	<b>12</b>				
Contact Rating	<table border="1"> <tr> <td>N.O.</td><td>5Amp @ 30VDC 5Amp @ 250VAC</td></tr> </table>	N.O.	5Amp @ 30VDC 5Amp @ 250VAC		
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### Isolated Digital Inputs

Channels	16
<b>Internal Power Supply:</b>	
Supported Signals	“Dry-Contact” OC NPN, OC PNP
<b>External Power Supply:</b>	
Supported Signals	“Wet-Contact”
Logic level ‘0’	0 to 3VDC
Logic level ‘1’	5 to 30VDC

### Analog inputs

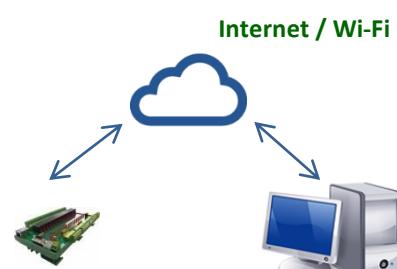
Channels	<b>8</b>															
Resolution	12bit															
Input Range	<table border="1"> <tr> <td></td><td>Defualt</td><td>Optional</td></tr> <tr> <td>Ch. 1</td><td>0-10VDC</td><td>0-5VDC</td></tr> <tr> <td>Ch. 2</td><td>0-25VDC</td><td>0-5VDC</td></tr> <tr> <td>Ch. 3-4</td><td>4-20mA</td><td>0-5VDC</td></tr> <tr> <td>Ch. 5-8</td><td>0-5VDC</td><td></td></tr> </table>		Defualt	Optional	Ch. 1	0-10VDC	0-5VDC	Ch. 2	0-25VDC	0-5VDC	Ch. 3-4	4-20mA	0-5VDC	Ch. 5-8	0-5VDC	
	Defualt	Optional														
Ch. 1	0-10VDC	0-5VDC														
Ch. 2	0-25VDC	0-5VDC														
Ch. 3-4	4-20mA	0-5VDC														
Ch. 5-8	0-5VDC															

### Event Counters

Channels	2
Shares	Digital Input 15, 16
Max. FRQ.	50 Hz @ 50% Duty Cycle

### General

Supply Voltage	24VDC +/- 10%
Supply Current	0.4Amp
Operating temperature	0~60°C
Storage temperature	-30~80°C
Mounting	Din-Rail 35, wall
Dimensions	265x115x45 mm
Weight	430gr



**Daisy Chain**

