ECS Hardware Reference Manual

COMIZOA

16CHANNEL DIGITAL INPUT MODULE

ECS-DI16P

COMputer Innovation is Zoomed by Our Affection

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개요

status indicator led

Digital input 0
Digital input 2
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I/O Power 24V

Digital input 1
Digital input 3
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Digital input 13
Digital input 15
I/O Power 0V
I/O Power 0V

Front view

EBUS
System Power
3.3Vdc
IO Power 24Vdc

Side View
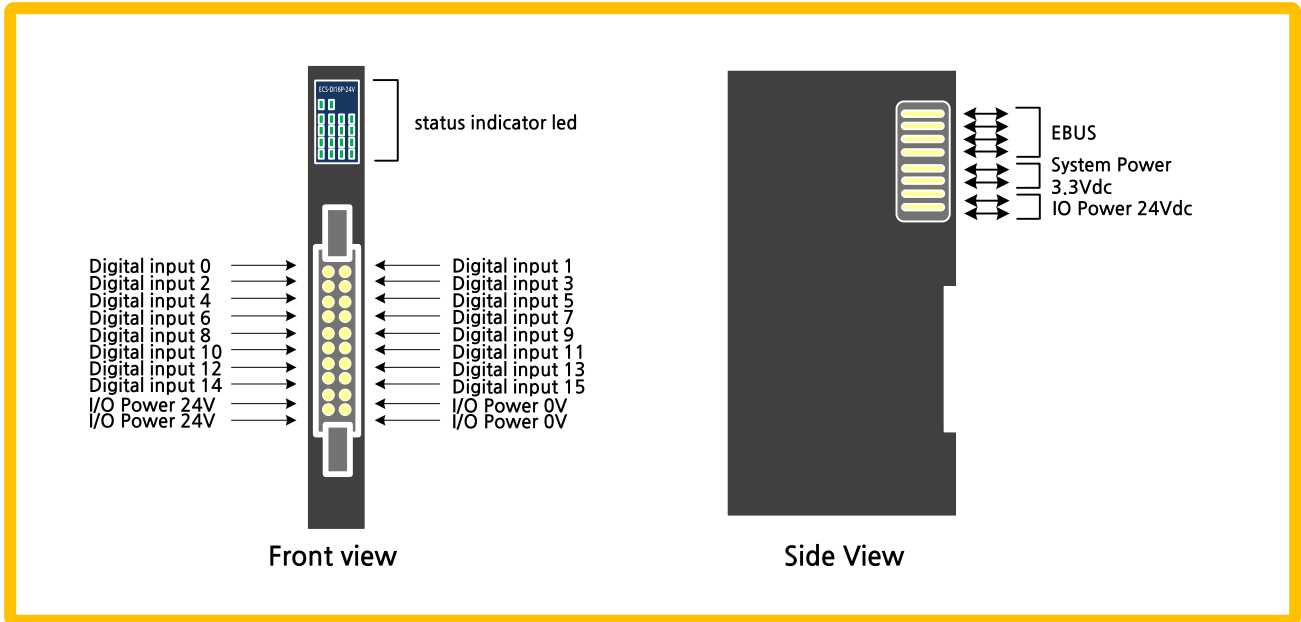
ECS Series – ECS-DI16P (Digital Input 16ch PNP)

ECS-DI16P는 EtherCAT 기반 제어기인 ECS Series의 16채널 Digital 입력 모듈입니다.

각 채널의 내부 제어신호와 외부 입출력 신호는 포토커플러를 사용하여 절연됩니다.

본 매뉴얼은 ECS-DI16P의 하드웨어 구성과 기능에 대해 설명하는 하드웨어 매뉴얼 입니다.

제품사양

◉ Digital Specification

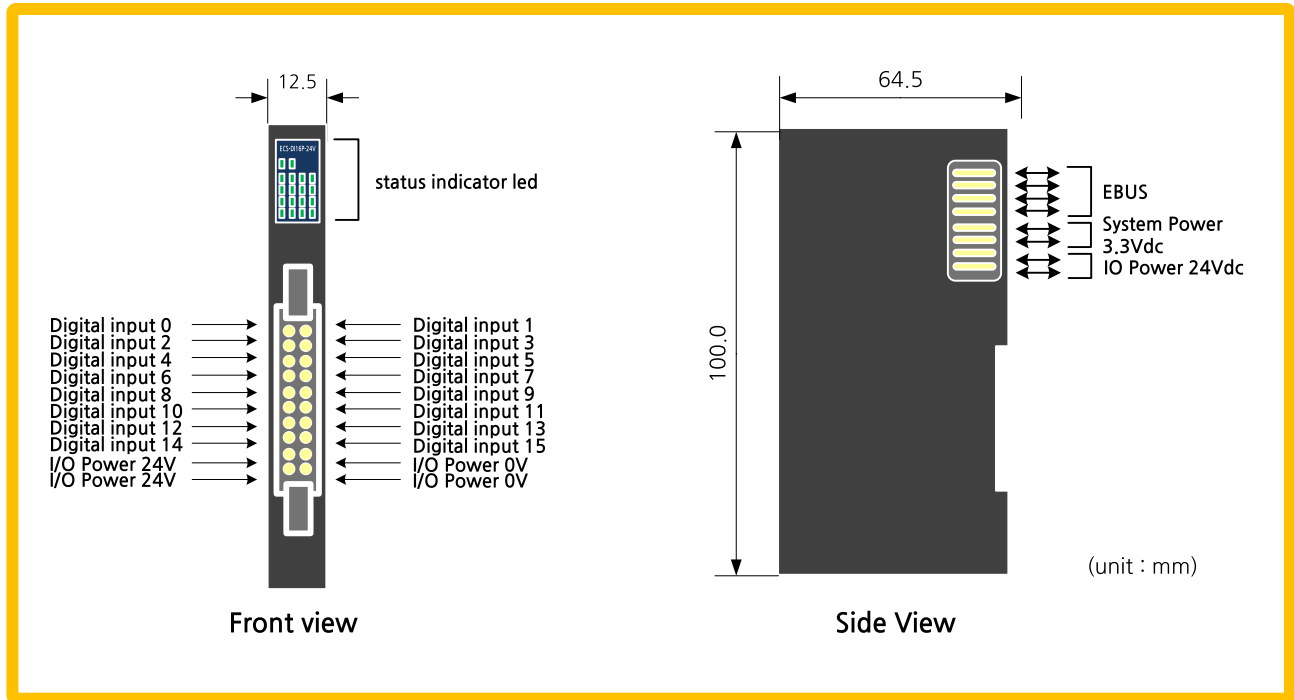| ITEM	ECS-DI16P-24V
Number of Inputs	16 input (1 Wire)
Input type	Current Sourcing type
Isolation	Photo-coupler(Viso=3,000Vrms)
On State Voltage(logic '1')	Min. 11V DC ~ Max 28.8 V DC EN61131-2, type 1/3
Off State Voltage(logic '0')	Max 5V DC EN61131-2, type 1/3
On State Current	Max. 5.5mA per @ 28.8V DC
Input Impedance	Approx. 5KΩ(±5%)
Wiring Contact	Ribbon Cable Connector(HIF3B-20PA-2.54DS)

◉ Power Specification

ITEM	ECS-DI16P-24V
Power Dissipation(System)	Max. 100mA @ 5.0V DC
Power Dissipation(I/O)	Max. 30mA @ 24.0V DC
Rated Input Voltage	24V DC (-15%/+20%, ripple ratio within 5%) EN 61131-2

◉ Environmental Specification

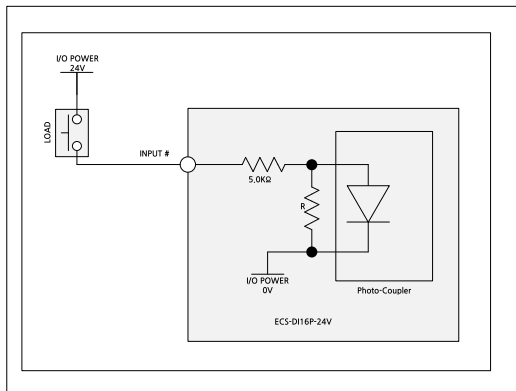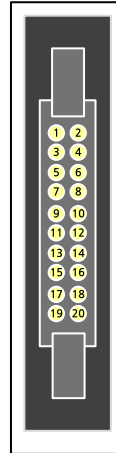| ITEM	ECS-DI16P-24V
Dimension	65 * 100 * 12.5 (mm)
Install	Industrial DIN rail
Operating Temperature Range	0℃ ~ 50℃
Storage Temperature Range	-20℃ ~ 80℃
Operating Humidity Range	5% ~ 90%RH, non-condensing
Storage Humidity Range	5% ~ 90%RH, non-condensing

제품사양

12.5

ECS-DI16P-24V

status indicator led

Digital input 0
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I/O Power 24V
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Digital input 5
Digital input 7
Digital input 9
Digital input 11
Digital input 13
Digital input 15
I/O Power 0V
I/O Power 0V

Front view

64.5

100.0

EBUS
System Power
3.3Vdc
IO Power 24Vdc

(unit : mm)

Side View

Dimension

Wiring

▣ Circuit Diagram

ECS-DI16P-24V

▣ PIN MAP

1	INPUT 0	2	INPUT 1
4	INPUT 2	4	INPUT 3
5	INPUT 4	6	INPUT 5
7	INPUT 6	8	INPUT 7
9	INPUT 8	10	INPUT 9
11	INPUT 10	12	INPUT 11
13	INPUT 12	14	INPUT 13
15	INPUT 14	16	INPUT 15
17	I/O PWR 24V	18	I/O PWR 0V
19	I/O PWR 24V	20	I/O PWR 0V

Indicators
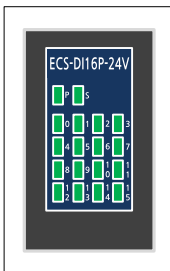
P	SYSTEM POWER LED	ON	SYSTEM POWER(5V DC) ON
		OFF	SYSTEM POWER(5V DC) OFF
S	EtherCAT AL STATE LED	OFF	INIT
		Blinking(slow)	PRE-OP
		Single Flash	SAFE-OP
		ON	OP
		Flickering(fast)	BOOTSTRAP
0-15	INPUT STATE LED	ON	INPUT ON STATE (LOGIC `1`)
		OFF	INPUT OFF STATE (LOGIC `0`)

Hardware Reference Manual Update List

No.	Version	Date	Changes in
1			First Edition
2	1.01	2016.02.29	글꼴변경 (나눔고딕, 굴림)

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