

# ECS Hardware Reference Manual



8CHANNEL ANALOG INPUT MODULE

ECS-AI08I

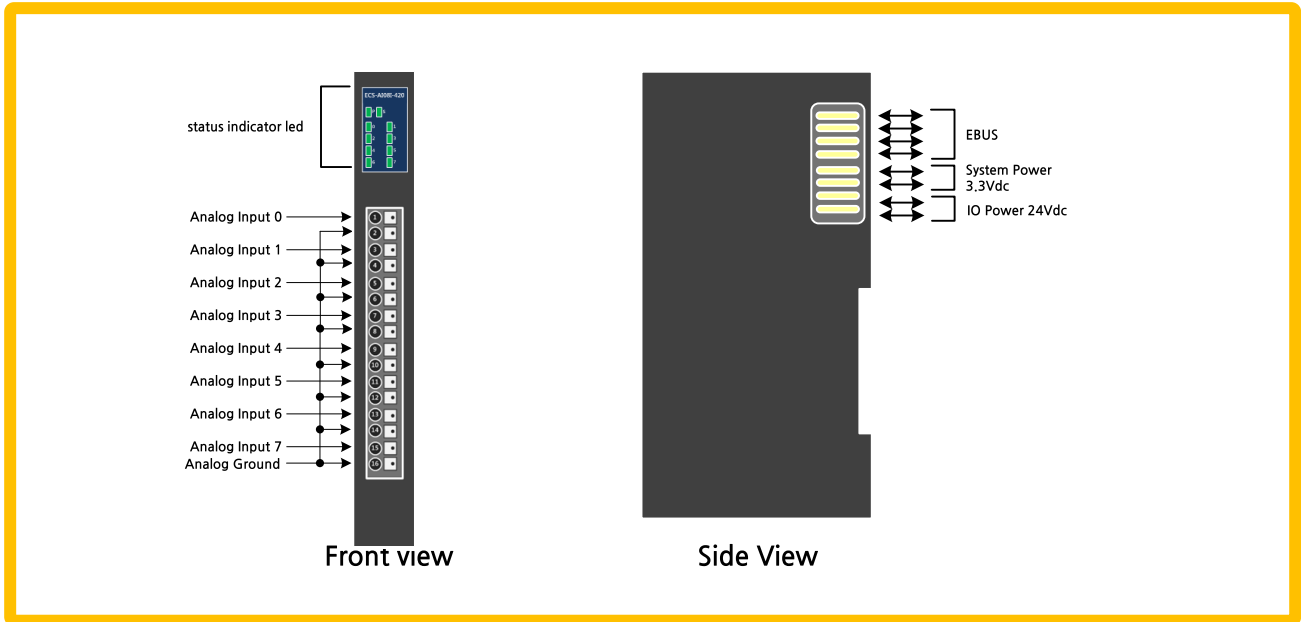
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**개요**

**ECS Series - ECS-AI08I (Analog Input 8ch)**

ECS-AI08I는 EtherCAT 기반 제어기인 ECS Series의 8채널 Analog 입력 모듈입니다.

각 채널의 내부 제어신호와 외부 입출력 신호는 포토커플러를 사용하여 절연됩니다.

본 매뉴얼은 ECS-AI08I의 하드웨어 구성과 기능에 대해 설명하는 하드웨어 매뉴얼입니다.

**제품사양**
**■ Analog Specification**

Contents	Details
Number of Inputs	8 Input
Input type	Single-ended
Resolution	13bit(2's Compliment)
Voltage Input Range	4 ~ 20 mA DC
Isolation	Non-isolated Between Channels I/O to Logic : Photo-coupler isolation ( 3KV )
Error	Bipolar Zero Error : $\pm 10.5$ LSB Positive Full-Scale Error : $\pm 8$ LSB Negative Full-Scale Error : $\pm 8$ LSB
Input Impedance	Approx. $250\Omega$ ( $\pm 5\%$ )
Wiring contactTE Connectivity)	LSF-SMT3,5-16P (Weidmuller)

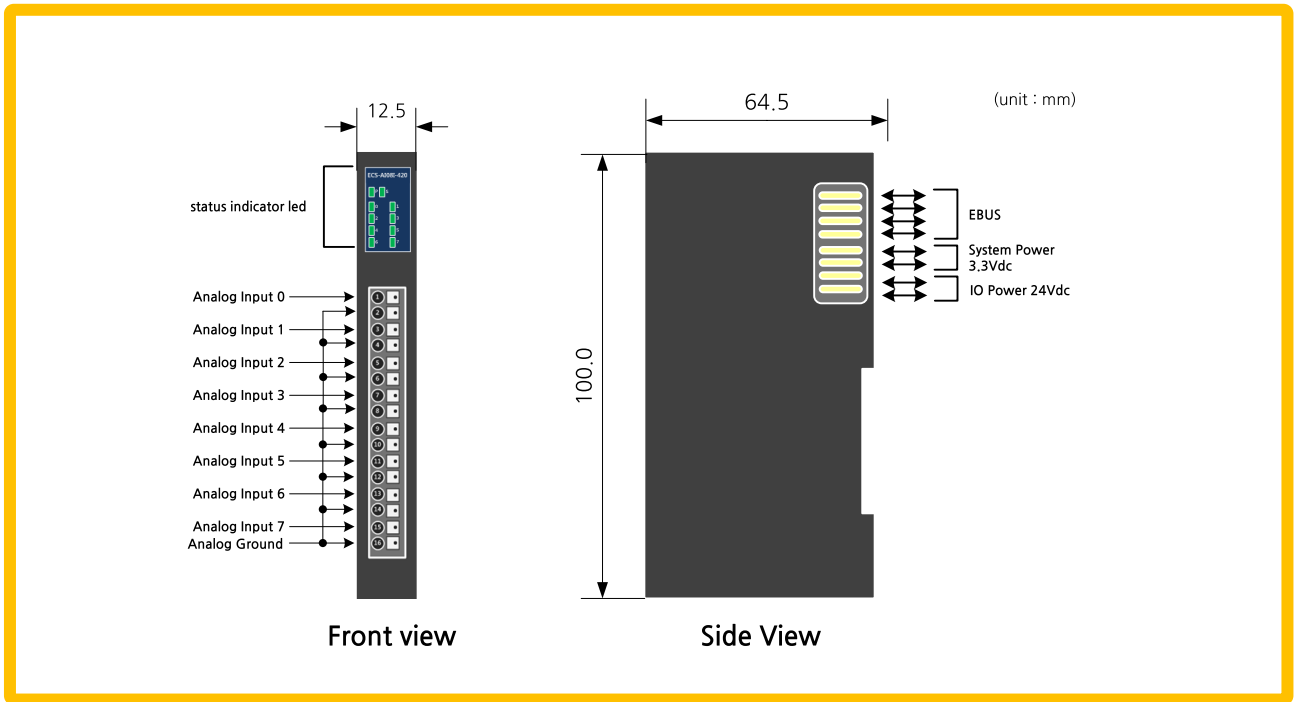
**■ Power Specification**

ITEM	Details
Power Dissipation(System)	Max. 100mA @ 5.0V DC
Power Dissipation(I/O)	Max. 50mA @ 24.0V DC
Rated Input Voltage	24V DC (-15%/+20%, ripple ratio within 5%) EN 61131-2

**■ Environmental Specification**

ITEM	Details
Dimension	65 * 100 * 12.5 (mm)
Install	Industrial DIN rail
Operating Temperature Range	0°C ~ 50°C
Storage Temperature Range	-20°C ~ 80°C
Operating Humidity Range	5% ~ 90%RH, non-condensing
Storage Humidity Range	5% ~ 90%RH, non-condensing

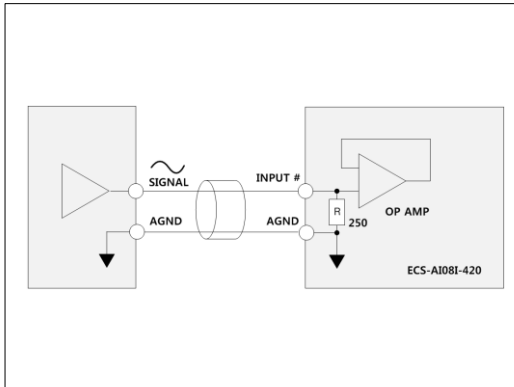
제품사양



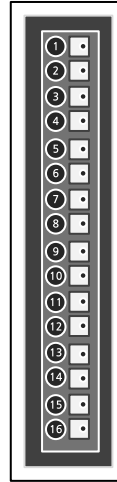
Dimension

Wiring

■ Circuit Diagram

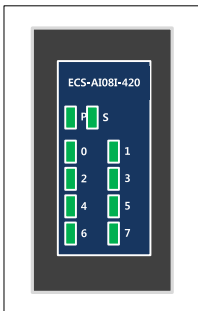


■ PIN MAP



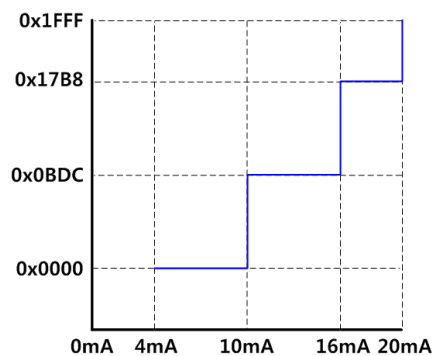
1	INPUT0
2	AGND
3	INPUT1
4	AGND
5	INPUT2
6	AGND
7	INPUT3
8	AGND
9	INPUT4
10	AGND
11	INPUT5
12	AGND
13	INPUT6
14	AGND
15	INPUT7
16	AGND

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
0-7	INPUT STATE LED	Flickering(fast)	BOOTSTRAP
		ON	RUN SAMPLING
		OFF	STOP SAMPLING

Analog Data



## 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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