

EPS Hardware Reference Manual



EtherCAT COUPLER MODULE

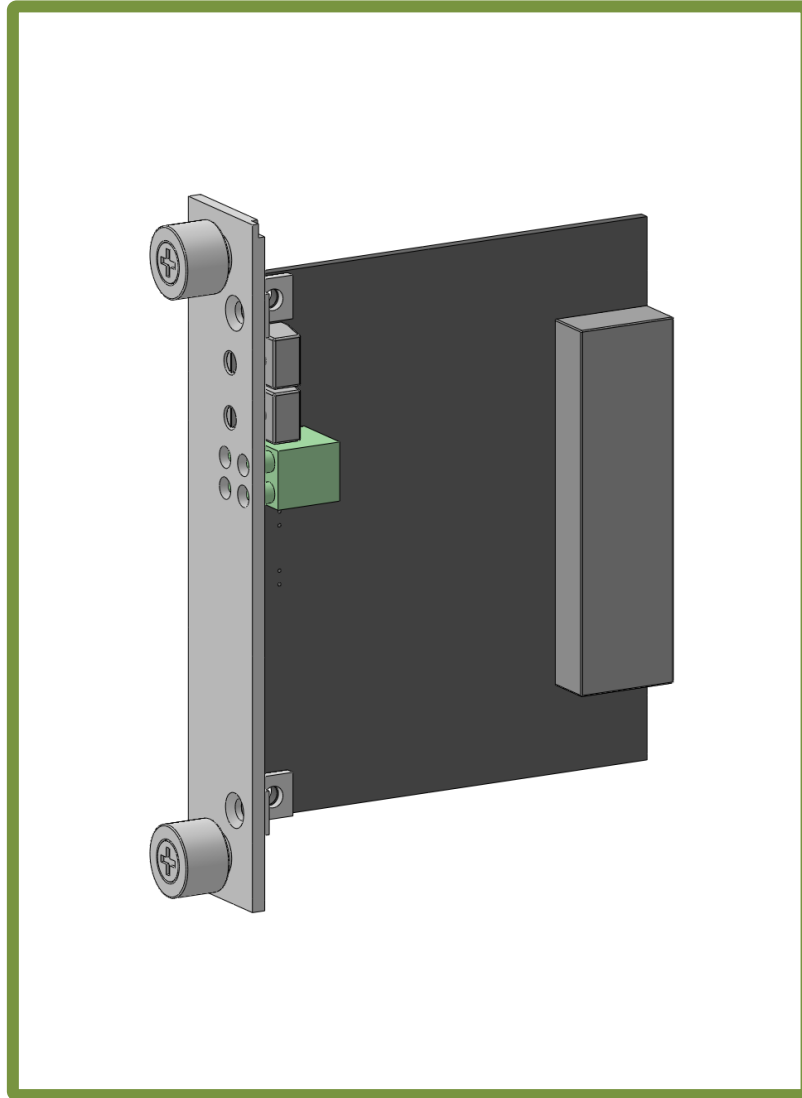
EPS-CPL00A (v1.00)

FEB 2016
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개요

EPS - CPL00A (EtherCAT COUPLER)

EPS-CPL00A은 커미조아의 EtherCAT 기반 제어기의 COUPLER 모듈입니다.

Master 모듈과 Slave 모듈 간의 EtherCAT 통신을 담당합니다.

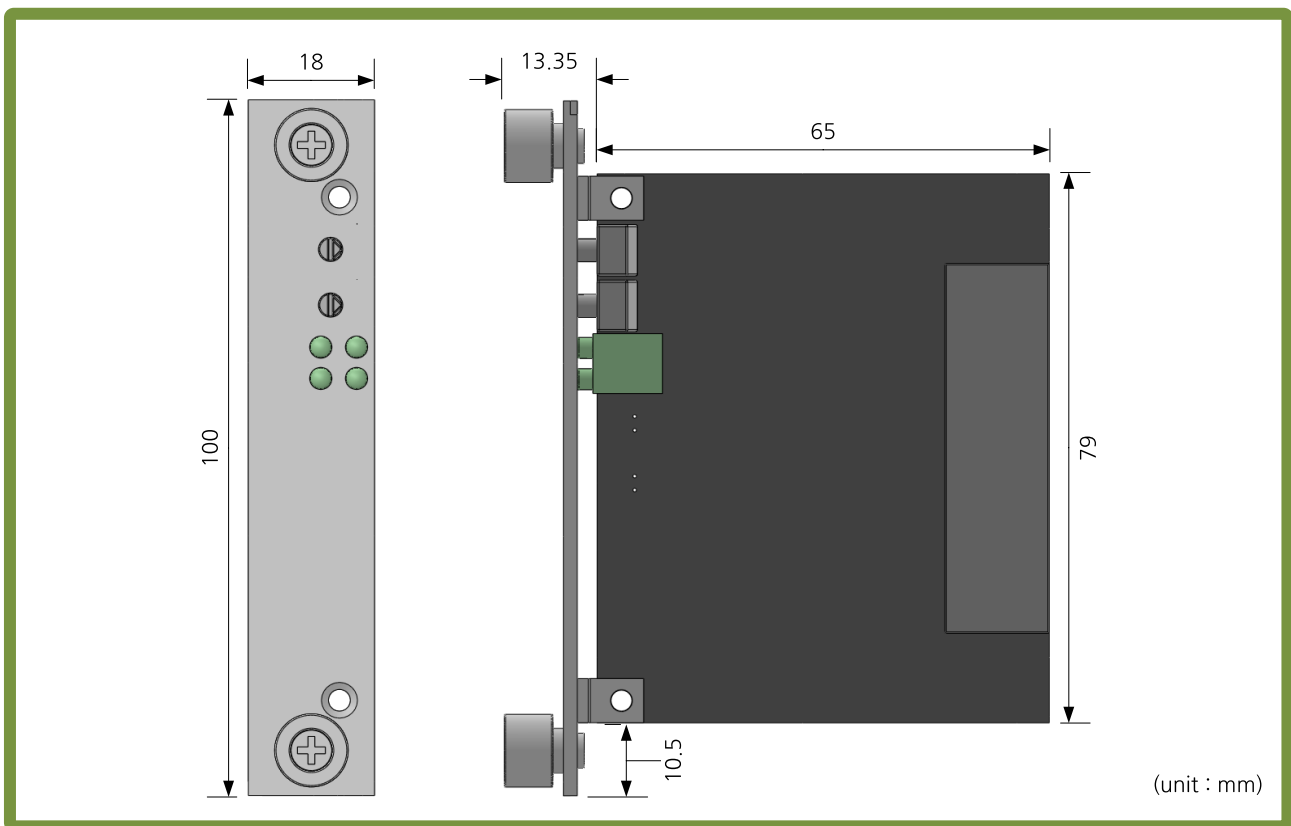
본 매뉴얼은 EPS-CPL00A의 하드웨어 구성과 기능에 대해 설명하는 하드웨어 매뉴얼 입니다.

- EtherCAT Slave Module
- CiA Standard 401 and ETG.5001 Modular Device Profile
- Supports Terminal Device ID
- Independent System Power

제품사양

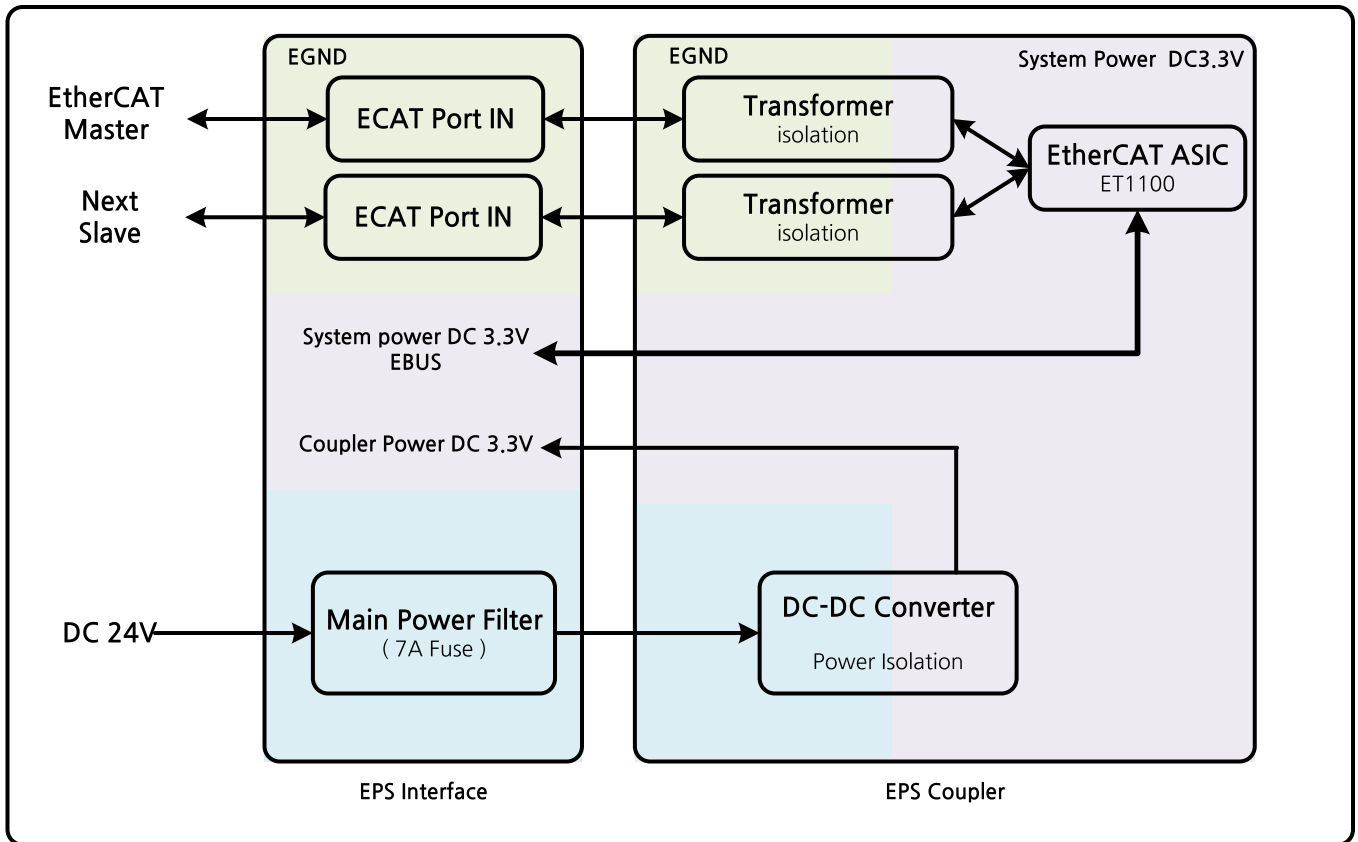
Contents	Details
Dimension	78.35 * 100 * 18 (mm)
Operating Temperature	0°C ~ 50°C
Storage Temperature	-20°C ~ 80°C
Humidity	5% ~ 90%, non-condensing
Power consumption	Power supply input +3.3V DC ± 5%, 250mA max
EtherCAT	2 Port (RJ-45 Connector)
	100 Mbps, Full-Duplex (Enable Auto-negotiation)
Wiring contact (TE Connectivity)	INTERFACE : 1-178136-2 CABLE : 1-178128-3

Environmental Specification



Dimension

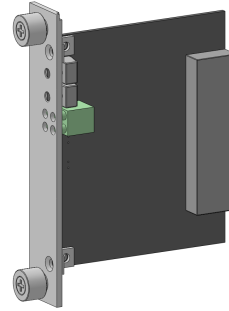
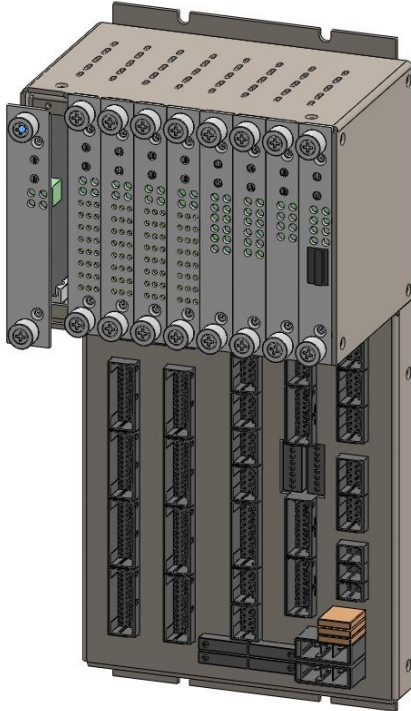
Block diagram



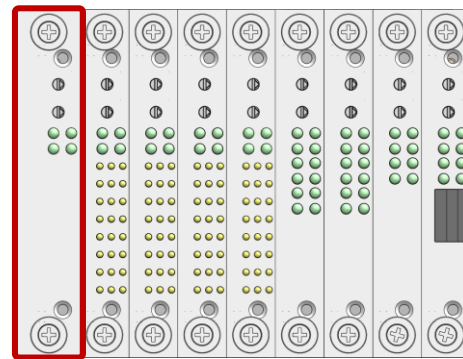
EPS-CPL00A Block diagram

Interface

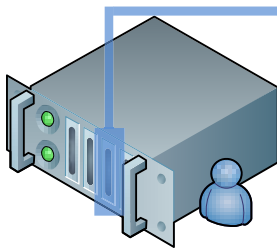
■ EPS-CHAMBER Connect



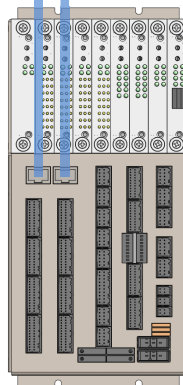
EPS-CPL00A



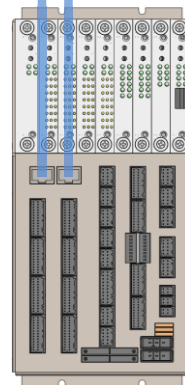
■ Slave Connect



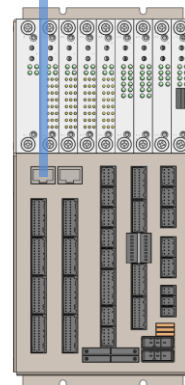
EtherCAT Master



EPS-CHAMBER (1)

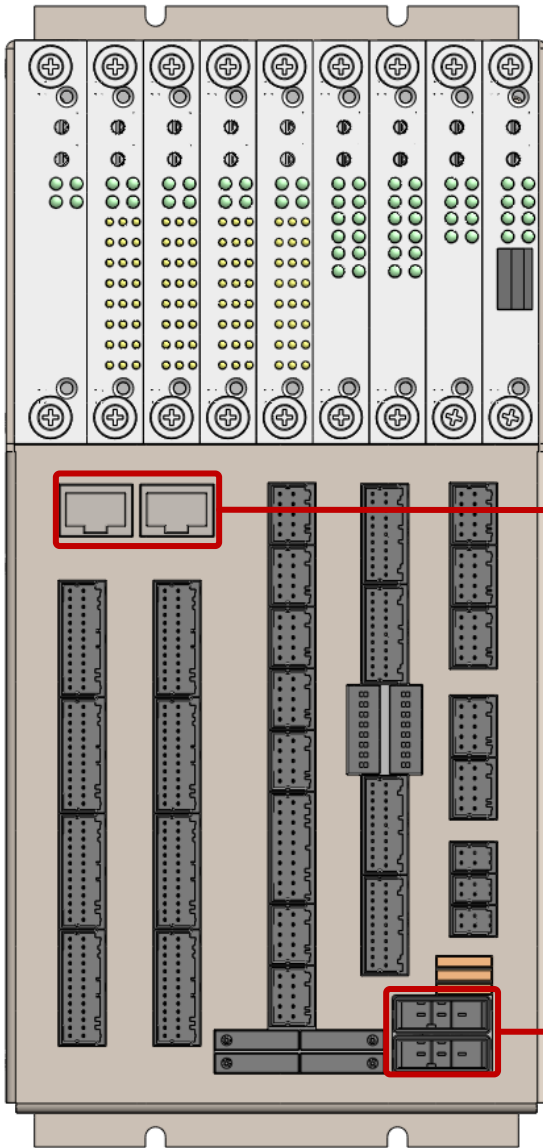


EPS-CHAMBER (2)



EPS-CHAMBER (n)

Connector

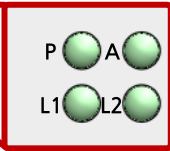
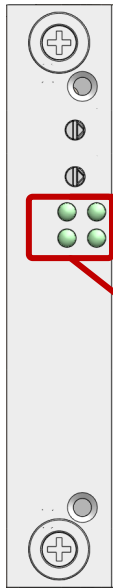


Pin #	IN	OUT
1	TX+	TX+
2	TX-	TX-
3	RX+	RX+
4	NC	NC
5	NC	NC
6	RX-	RX-
7	NC	NC
8	NC	NC

Pin #	
1	P24V
2	-
3	N24V

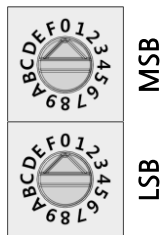
1-178136-2 (DC_OUT)
(DC_IN)

Status LED



P	BOX POWER LED	ON	BOX POWER(3.3V DC) ON
		OFF	BOX POWER(3.3V DC) OFF
A	EtherCAT AL STATE LED	OFF	INIT
		Blinking(slow)	PRE-OP
		Single Flash	SAFE-OP
		ON	OP
		Flickering(fast)	BOOTSTRAP
L1	LINK 0 STATE LED	Blinking(slow)	MII Port IN OPEN
		OFF	MII Port IN Closed
L2	LINK 1 STATE LED	Blinking(slow)	MII Port OUT OPEN
		OFF	MII Port OUT Closed

Device ID Setting



ID. Setting	$ID = MSB * 16 + LSB$
ID. Range	1 ~ 254

※ 각 Terminal의 ID는 Digital Input PDO로 입력됨.

Hardware Reference Manual Update List

No.	Version	Date	Changes in
1	1.00	2015.05.28	First Edition
2	1.01	2016.02.26	글꼴 나눔고딕/굴림으로 변경

EPS Reference Manual

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