

EVS Hardware Reference Manual



32CHANNEL DIGITAL NPN TYPE INPUT MODULE

EVS-DI32N

MARCH 2016
©2016 COMIZOA, All rights reserved

Hardware Manual Revision : 1.0.1
Revision Data 2016. 03. 01

Table Of Contents

1	개요	1
2	제품사양	2
3	Block diagram	3
4	Connector	4
5	<i>Status LED</i>	5
6	<i>Digital 입력 신호</i>	5

개요



EVS - DI32N (Digital NPN Input 32ch)

EVS-DI32N은 커미조아의 EtherCAT 기반 제어기의 32채널 Digital 입력 모듈입니다.
 각 채널의 내부 제어신호와 외부 입출력 신호는 포토커플러를 사용하여 절연됩니다.
 본 매뉴얼은 EVS-DI32N의 하드웨어 구성과 기능에 대해 설명하는 하드웨어 매뉴얼입니다.

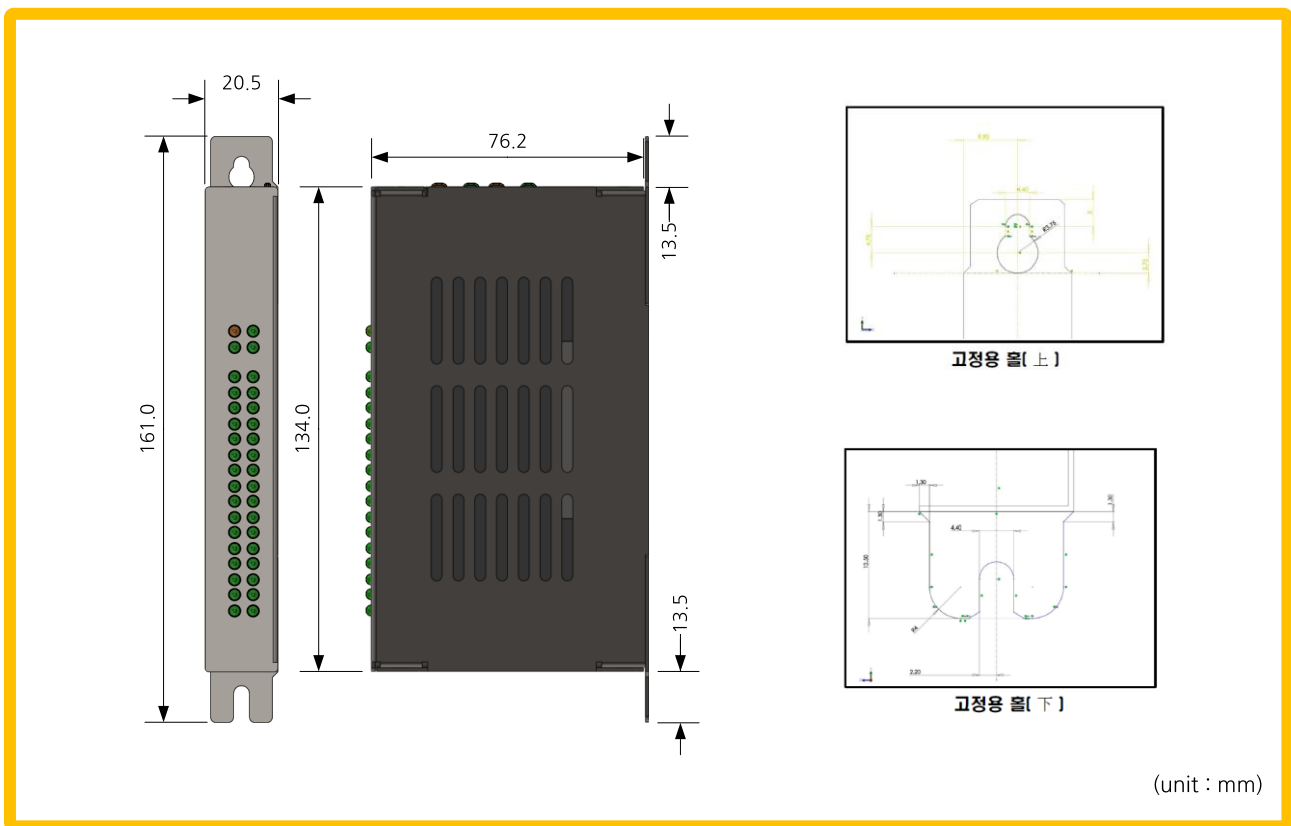
제품사양

Contents	Details
Dimension	20.5 x 76.2 x 161.0 (mm)
Operating Temperature	0°C ~ 50°C
Storage Temperature	-20°C ~ 80°C
Humidity	5% ~ 90%, non-condensing
Power consumption	Power supply input +24V DC \pm 5%, 300mA max
EtherCAT	2 Port (RJ-45 Connector)
	100 Mbps, Full-Duplex (Enable Auto-negotiation)

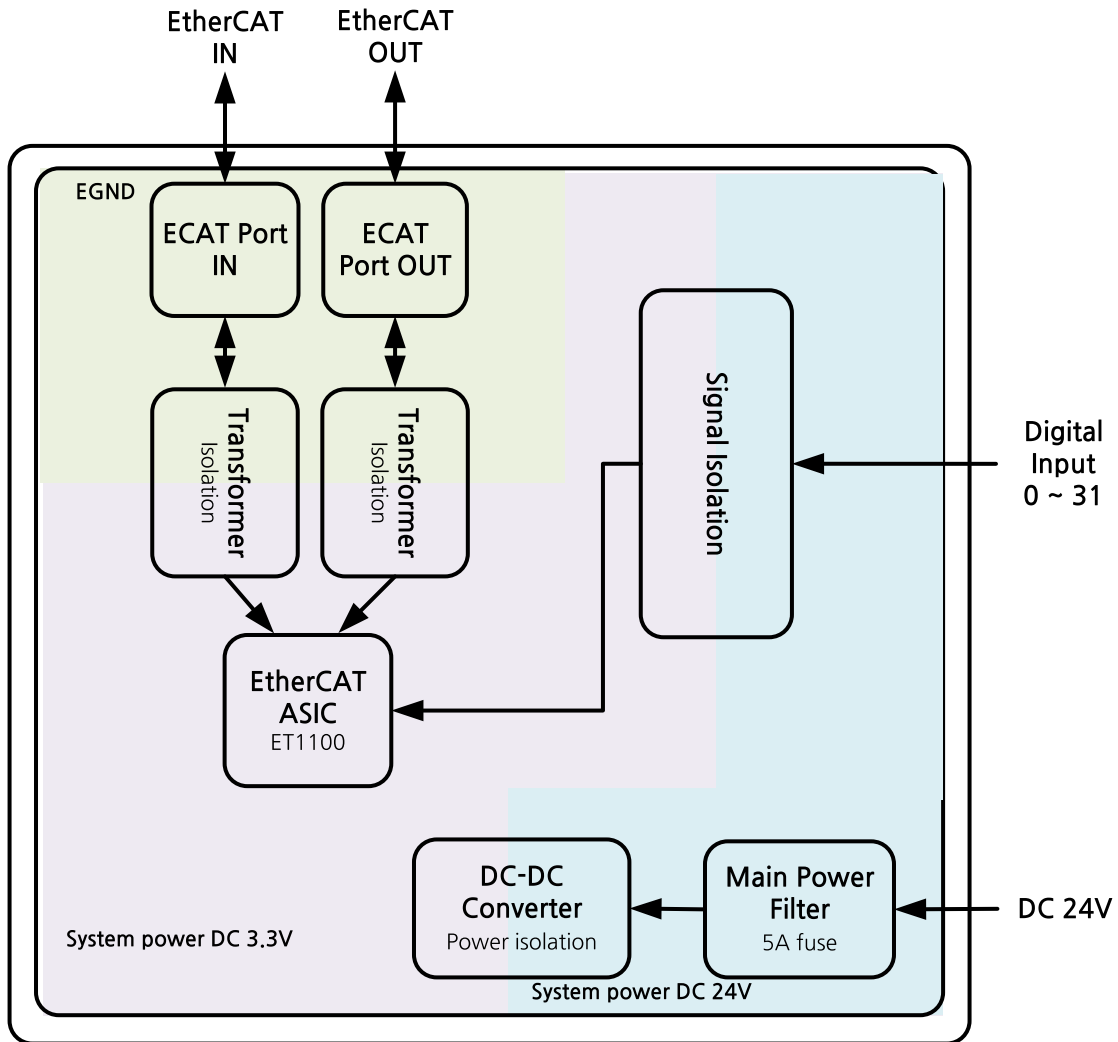
Environmental Specification

Contents	Details
Number of Inputs	32 inputs
Input type	Current Sinking type (NPN)
Isolation	Photo-coupler ($V_{iso} = 3,000V_{rms}$)
OFF State Voltage (logic ' 1')	Min. 11V DC ~ Max. 28.8 V DC (EN 61131-2, type 1/3)
On State Voltage (logic ' 0')	Min. 0V DC ~ Max. 5V DC (EN 61131-2, type 1/3)
On state Current	Max. 4.2mA per @ 28.8V DC
Input Impedance	Approx. 6.6K Ω (\pm 5%)

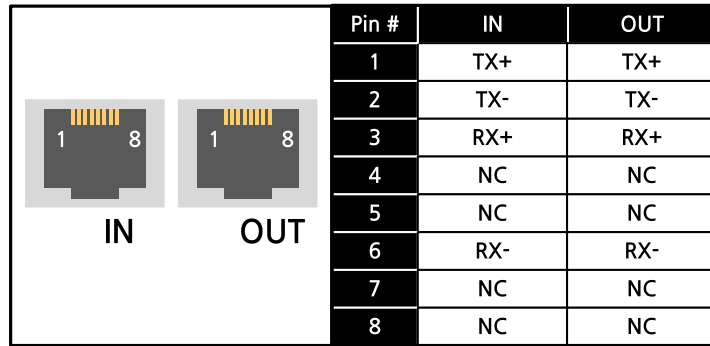
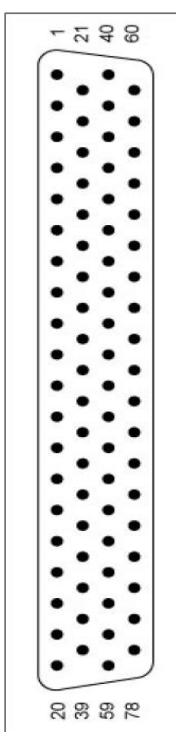
Digital Input Specification



Block diagram



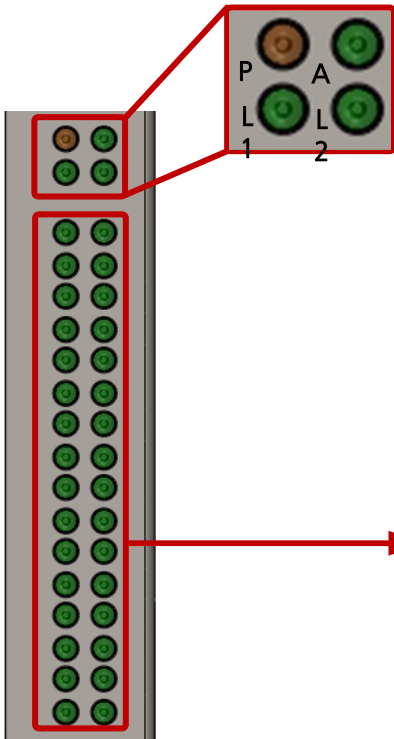
EVS-DI32N Block diagram

Connector

**ETHERCAT CONNECTOR
(CAT.5E ↑)**


Pin #		Pin #		Pin #		Pin #	
1	VCC(+24V)	21	INPUT #00	40	INPUT #19	60	GROUND
2	VCC(+24V)	22	INPUT #01	41	INPUT #20	61	GROUND
3	VCC(+24V)	23	INPUT #02	42	INPUT #21	62	GROUND
4	VCC(+24V)	24	INPUT #03	43	INPUT #22	63	GROUND
5	VCC(+24V)	25	INPUT #04	44	INPUT #23	64	GROUND
6	VCC(+24V)	26	INPUT #05	45	INPUT #24	65	GROUND
7	VCC(+24V)	27	INPUT #06	46	INPUT #25	66	GROUND
8	VCC(+24V)	28	INPUT #07	47	INPUT #26	67	GROUND
9	VCC(+24V)	29	INPUT #08	48	INPUT #27	68	GROUND
10	VCC(+24V)	30	INPUT #09	49	INPUT #28	69	GROUND
11	VCC(+24V)	31	INPUT #10	50	INPUT #29	70	GROUND
12	VCC(+24V)	32	INPUT #11	51	INPUT #30	71	GROUND
13	VCC(+24V)	33	INPUT #12	52	INPUT #31	72	GROUND
14	VCC(+24V)	34	INPUT #13	53	-	73	GROUND
15	VCC(+24V)	35	INPUT #14	54	-	74	GROUND
16	VCC(+24V)	36	INPUT #15	55	-	75	GROUND
17	VCC(+24V)	37	INPUT #16	56	-	76	GROUND
18	VCC(+24V)	38	INPUT #17	57	-	77	GROUND
19	VCC(+24V)	39	INPUT #18	58	-	78	GROUND
20	VCC(+24V)			59	-		

I/O CONNECTOR (D-SUB 78PIN)

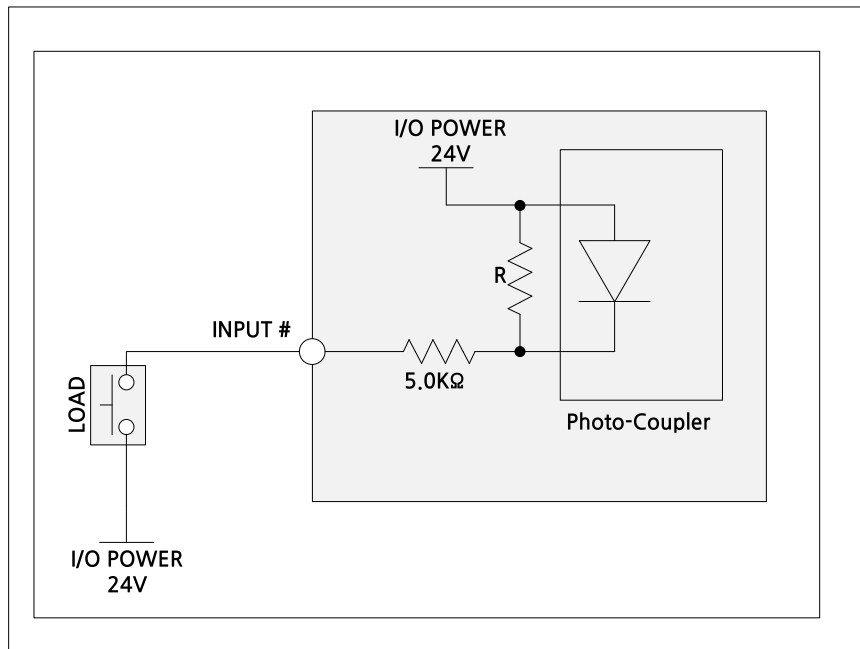
Status LED



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
L1	LINK 0 STATE LED	Flickering(fast)	BOOTSTRAP
		Blinking(slow)	MII Port IN OPEN
L2	LINK 1 STATE LED	OFF	MII Port IN Closed
		Blinking(slow)	MII Port OUT OPEN
		OFF	MII Port OUT Closed

0-31	INPUT STATE LED	ON	INPUT ON STATE (LOGIC '1')
		OFF	INPUT OFF STATE (LOGIC '0')

DIGITAL INPUT CIRCUIT



Hardware Reference Manual Update List

No.	Version	Date	Changes in
1	1.00	2015.07.29	release
2	1.01	2016.03.01	폰트 교체(나눔고딕,굴림)

EVS Reference Manual

Copyright holder : COMIZOA CO.,LTD
Copyright (c) by COMIZOA CO.,LTD. All right reserved.
2016. 03. 01.



COMIZOA CO.,LTD
<http://www.comizoa.com>
Tel) +82 - 42 - 936 - 6500
Fax) +82 - 42 - 936 - 6507

All the details including figures and programs included in this manual is protected by Korean Copyright.
Any parts of this manual can be copied or distributed without COMIZOA's permission.