



# ETS-DI16N | 16 Digital Input, 24V DC, Current Sinking

## Specification

### Power Specification

ITEM	ETS-DI16N
Power Dissipation ( System )	Max 40mA @ 24.0V DC
Power Dissipation ( I/O )	Max 30mA @ 24.0V DC
Rated input Voltage	24V DC ( - 15% / + 20%, ripple ratio within 5% ) EN 61131-2

### Comm. Specification

ITEM	ETS-DI16N
Transmission speed for EtherCAT	10/100 Mbit/s with Full Duplex
MDI/MDI-X	MDI/MDI-X auto-crossover.
ESD Protection	Contact Discharge (Typ.) 4kV
	Air Discharge (Typ.) 8kV

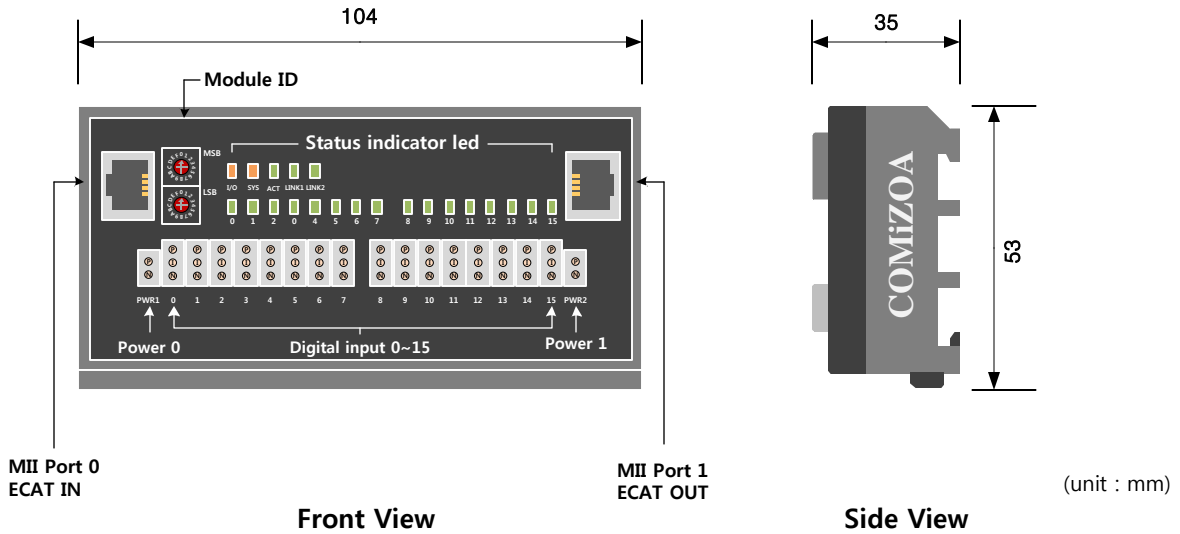
### Digital Specification

ITEM	ETS-DI16N
Number of Inputs	16 input
Input type	Current Sink Type ( NPN )
Isolation	Photo-coupler ( $V_{iso} = 3,000V_{rms}$ )
On State Voltage (logic '1')	Min. 11V DC ~Max 28.8 V DC EN 61131-2, type 1/3
On State Voltage (logic '0')	Min. 5V DC EN 61131-2, type 1/3
On state Current	Max. 4.2mA per @ 28.8V DC
Input Impedance	Approx. 5.1K $\Omega$ ( $\pm 5\%$ )
Wiring contact	5264-03(DI 3Pin), 5264-02(PWR 2Pin)

### Environmental Specification

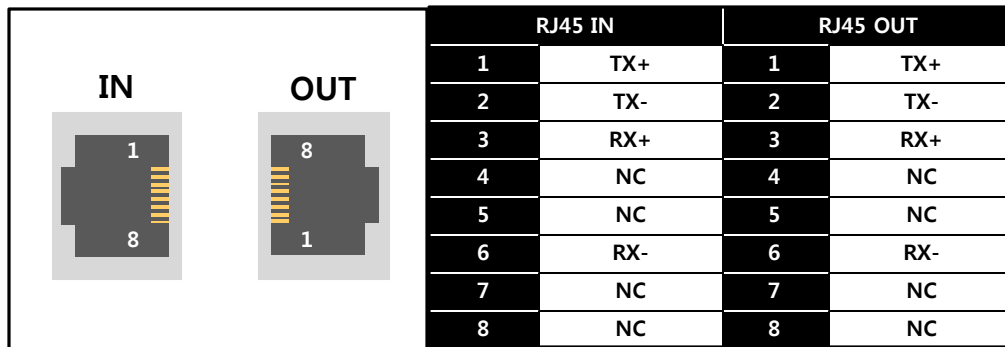
ITEM	ETS-DI16N
Dimension	104 * 53 * 35 (mm)
Install	Industrial DIN rail
Operating Temperature Range	0°C ~ 50°C
Storage Temperature Range	-20°C ~ 80°C
Operating Humidity Range	5% ~ 90%, non-condensing
Storage Humidity Range	5% ~ 90%, non-condensing

**Dimension**

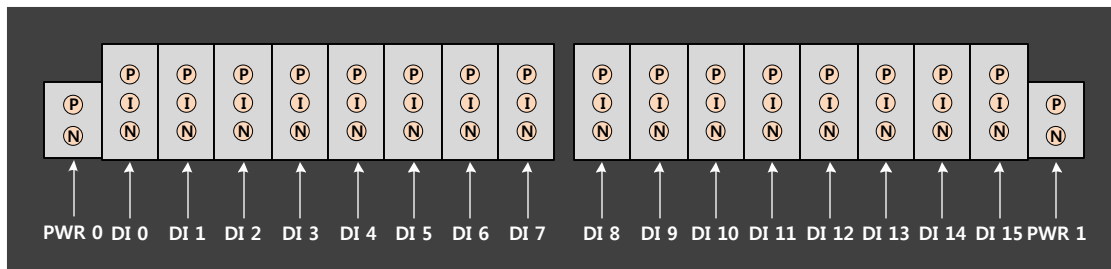


**Wiring**

▣ RJ45 Connector

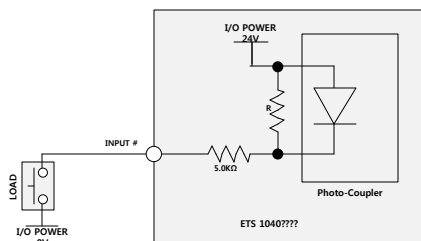


▣ Contact Number

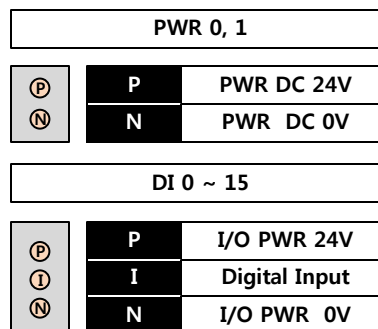


※ All numberings are zero based

▣ Circuit Diagram



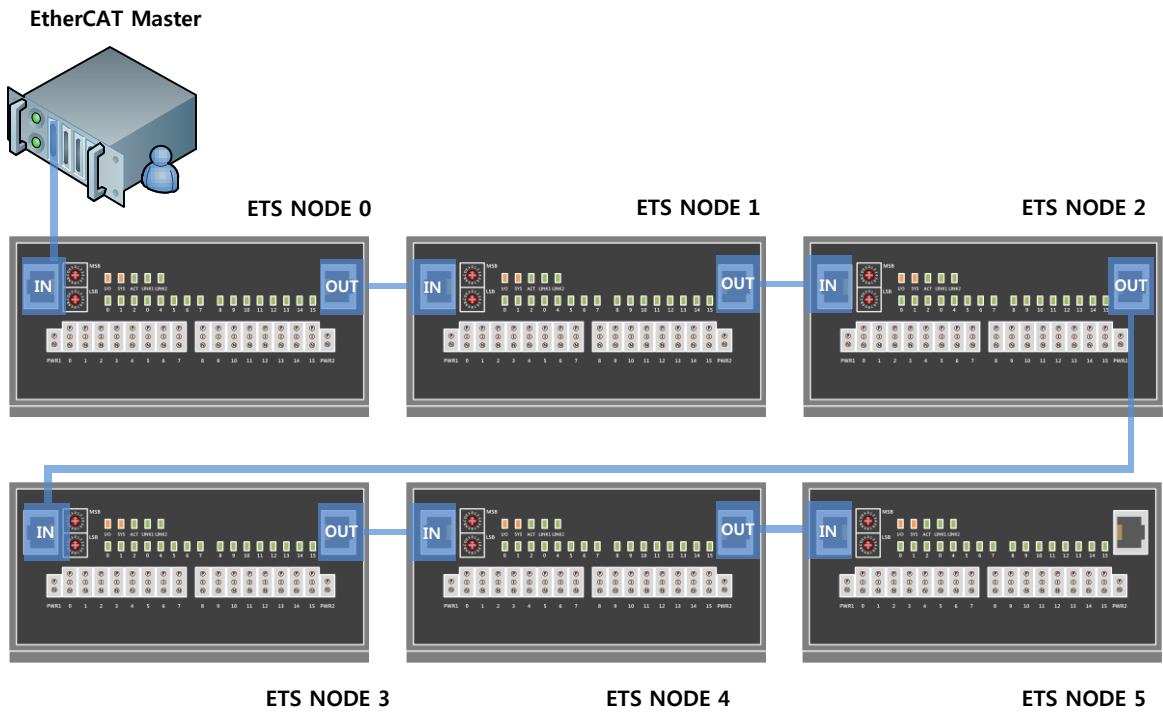
▣ PIN MAP



Indicators

I/O	I/O POWER LED	ON	DIGITAL I/O POWER(24V DC) ON
		OFF	DIGITAL I/O POWER(24V DC) OFF
SYS	SYSTEM POWER LED	ON	SYSTEM POWER(3.3V DC) ON
		OFF	SYSTEM POWER(3.3V DC) OFF
ACT	EtherCAT AL STATE LED	OFF	INIT
		Blinking(slow)	PRE-OP
		Single Flash	SAFE-OP
		ON	OP
		Flickering(fast)	BOOTSTRAP
LINK 0(1)	LINK 0(1) STATE LED	Blinking(slow)	MII Port 0(1) OPEN
		OFF	MII Port 0(1) Closed
DI 0-15	INPUT STATE LED	ON	INPUT ON STATE (LOGIC '1')
		OFF	INPUT ON STATE (LOGIC '0')

Interface Connect



Device ID Setting

	NODE ID setting	$I.P = MSB * 16 + LSB$
	NODE ID range	1 ~ 256

■ CAUTION