



ETS-D08MP | 8 Digital Input/Output, 24V DC, Current Sinking

Specification

Power Specification

ITEM	Details
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	Details
Transmission speed for EtherCAT	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

Contents	Details
Number of Inputs	Isolated 8 Input
Input type	Current source type (PNP)
Input Range	DC 0 ~ 24V
Input Current	Min. 3.6mA / channel
Input Impedance	5.1 KOhm
Input Level Tolerant	Low (Min. 0V ~ Max. 5V)
	High (Min. 18V ~ Max. 24V)
Isolation	1 KV Channel to Channel

Digital Input Specification

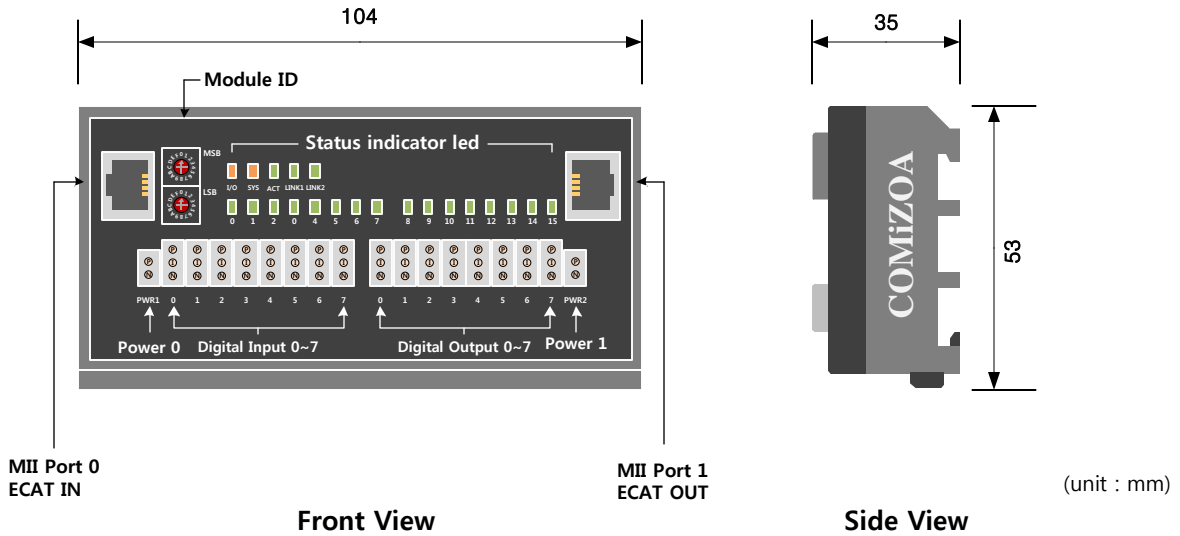
Contents	Details
Number of Outputs	Isolated 8 Output
Output type	MOSFET with common ground (PNP)
Output Voltage	Min. 5V ~ Max. 35V
Sink Current	Max. 500mA / channel
Rds(On state resistance)	Max. 500mOhm
Throughput	10Khz (0.1ms)
Overload Shutdown	1.1A Min ~ 2A Max

Digital Output Specification

Environmental Specification

ITEM	Details
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%RH, non-condensing
Storage Humidity Range	5% ~ 90%RH, non-condensing

Dimension

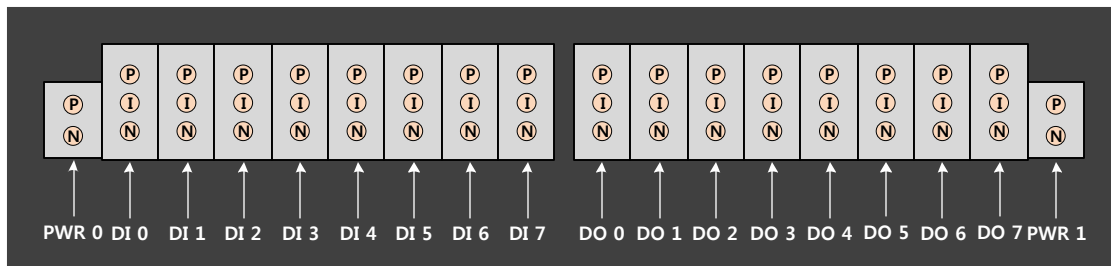


Wiring

▣ RJ45 Connector

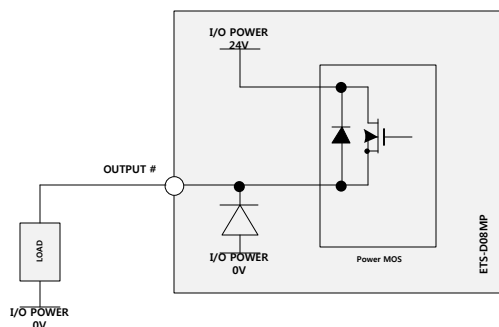
IN		OUT		RJ45 IN		RJ45 OUT	
1	8	8	1	1	TX+	1	TX+
				2	TX-	2	TX-
				3	RX+	3	RX+
				4	NC	4	NC
				5	NC	5	NC
				6	RX-	6	RX-
				7	NC	7	NC
				8	NC	8	NC

▣ Contact Number



※ All numberings are zero based

▣ Circuit Diagram



▣ PIN MAP

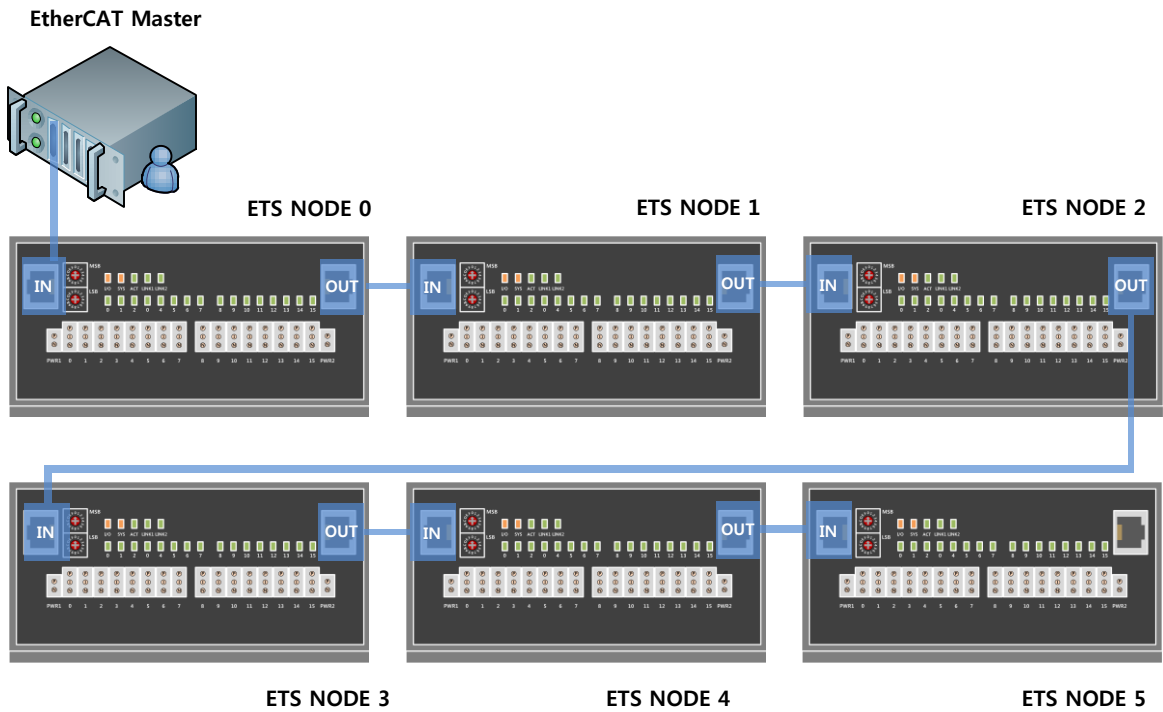
PWR 0, 1	
P	PWR 24V
N	PWR 0V

DIO 0 ~ 7	
P	I/O PWR 24V
I/O	Digital In/Out
N	I/O PWR 0V

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 0-7 DO 0-7	OUTPUT STATE LED	ON	OUTPUT ON STATE (LOGIC ' 1')
		OFF	OUTPUT ON STATE (LOGIC ' 0')

Interface Connect



Device ID Setting

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

■ CAUTION