EtherCAT

ECAT-2057-8P8N

EtherCAT Slave I/O Module with Isolated 8-ch Source-type and 8-ch Sink type Digital Outputs (RoHS)

Features

- On the fly processing: EtherCAT
- Powerful MCU handles efficient network traffic
- 2 x RJ-45 bus interface
- Distance between stations up to 100 m (100 BASE-TX)
- Support daisy chain connection
- EtherCAT conformance test tool verified
- Removable terminal block connector
- LED indicators for the output status
- Built-In isolated 8-ch source-type and 8-ch sink type digital outputs
- RoHS compliant
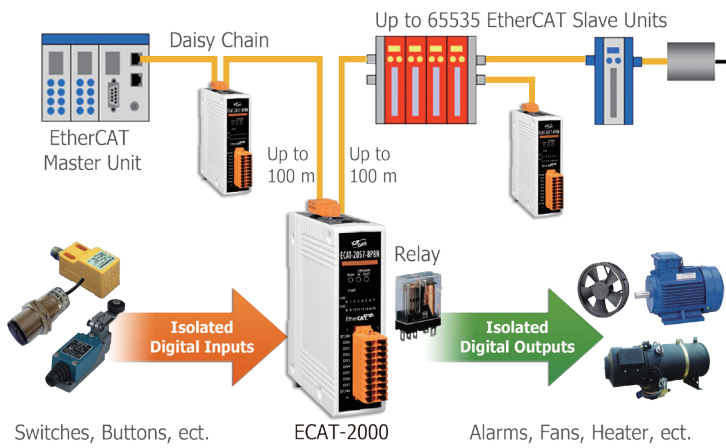- ESD Protection 4 KV Contact for each channel

CE FC RoHS

☑ Introduction

The ECAT-2057-8P8N is an industrial slave I/O module built in 16 digital outputs. It is equipped with the EtherCAT* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2057-8P8N has passed and verified by the conformance test tool, therefore eligible EtherCAT Master or configurator can manipulate it simply and implement your various applications easily.

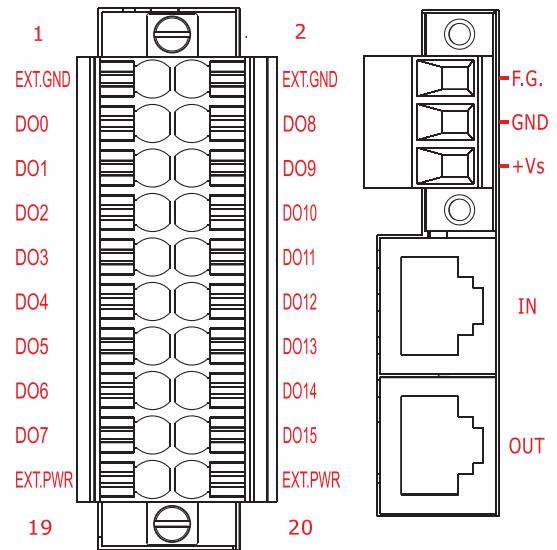∗ EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

☑ Hardware Specifications

Model	ECAT-2057-8P8N	
Digital Output		
Channels	8	8
Output Type	Open Collector (Sink)	Open Emmitter (Source)
Load Voltage	+3.5 ~ 30 V	
Max. Load Current	100 mA per channel	
Isolation Voltage	3750 V$_{DC}$	
Communication Interface		
Connector	2 x RJ-45	
Protocol	EtherCAT	
Distance between Stations	Max. 100 m (100 BASE-TX)	
Data Transfer Medium	Ethernet/EtherCAT Cable (Min. CAT 5), Shielded	
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal	
EFT (IEC 61000-4-4)	Signal: 1 KV Class A; Power: 1 KV Class A	
Surge (IEC 61000-4-5)	1 KV Class A	
Power		
Input Voltage Range	10 ~ 30 V$_{DC}$	
Power Consumption	4 W Max.	
Mechanical		
Dimensions (H x W x D)	110 mm x 90 mm x 33 mm	
Installation	DIN-Rail Mounting	
Case Material	UL 94V-0 Housing	
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-30 ~ +80°C	
Relative Humidity	10 ~ 90% RH, Non-condensing	

ECAT-2057-8P8N

☑ Applications

EtherCAT Master Unit

Daisy Chain

Up to 65535 EtherCAT Slave Units

Up to 100 m

Up to 100 m

Relay

ECAT-2000

Isolated Digital Inputs

Isolated Digital Outputs

Switches, Buttons, ect.

Alarms, Fans, Heater, ect.

☑ Pin Assignments

1		2	
EXT.GND		EXT.GND	F.G.
DO0		DO8	GND
DO1		DO9	+Vs
DO2		DO10	
DO3		DO11	
DO4		DO12	IN
DO5		DO13	
DO6		DO14	
DO7		DO15	OUT
EXT.PWR		EXT.PWR	
19		20	

☑ Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay	EXT.PWR DOx EXT.GND	EXT.PWR DOx EXT.GND
Resistance Load	EXT.PWR DOx EXT.GND	EXT.PWR DOx EXT.GND

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay	DOx Ext.PWR Ext.GND	DOx Ext.PWR Ext.GND
Resistance Load	Load DOx Ext.PWR Ext.GND	Load DOx Ext.PWR Ext.GND

☑ Dimensions (Units: mm)

108
90
37.2
35.6
37.2
7

Left Side View

33
127
110

Front View

Right Side View

Rear View

Top View

Bottom View
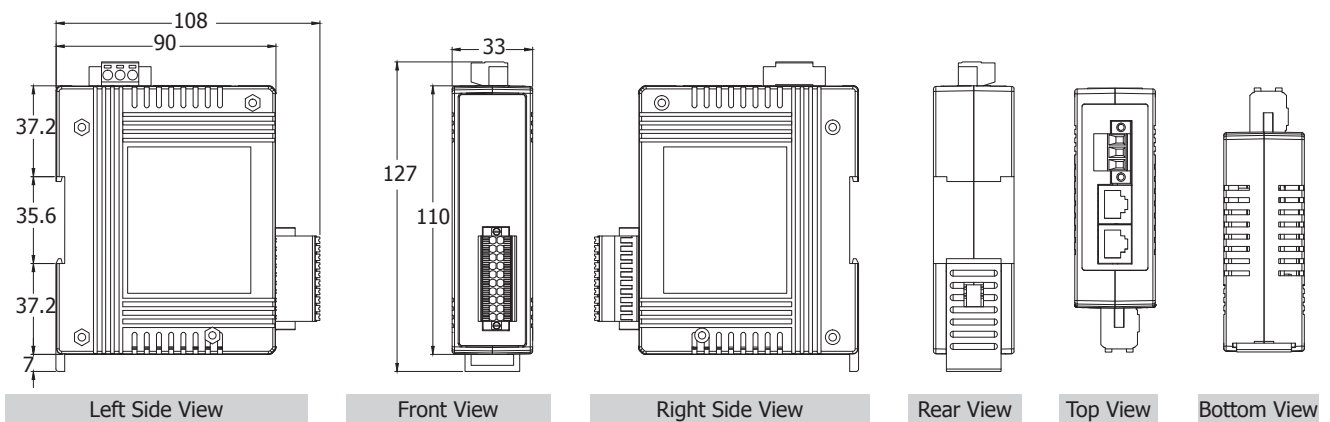
☑ Ordering Information

ECAT-2057-8P8N CR	EtherCAT Slave I/O Module with Isolated 8-ch Source-type and 8-ch Sink type Digital Outputs (RoHS)

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