ECAT-2061

EtherCAT Slave I/O Module with Isolated 16-ch Relay DO

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 input status
- Built-In Outputs: 16 Relay DO
- RoHS compliant
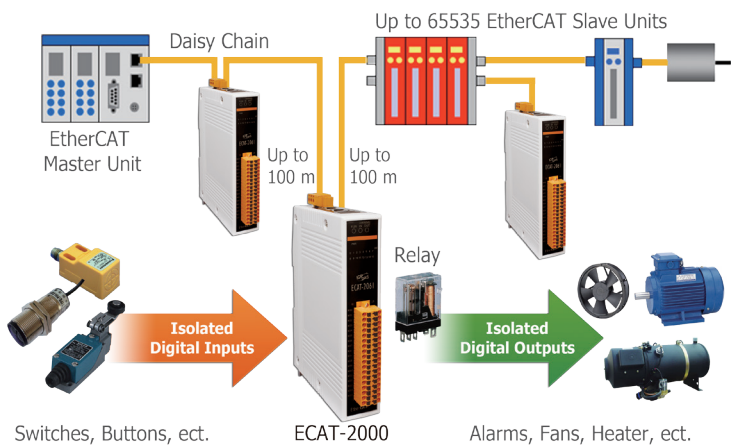- ESD Protection 4 KV Contact for each channel

Introduction

The ECAT-2061 is an industrial slave I/O module built in 16 relay 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-2061 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.
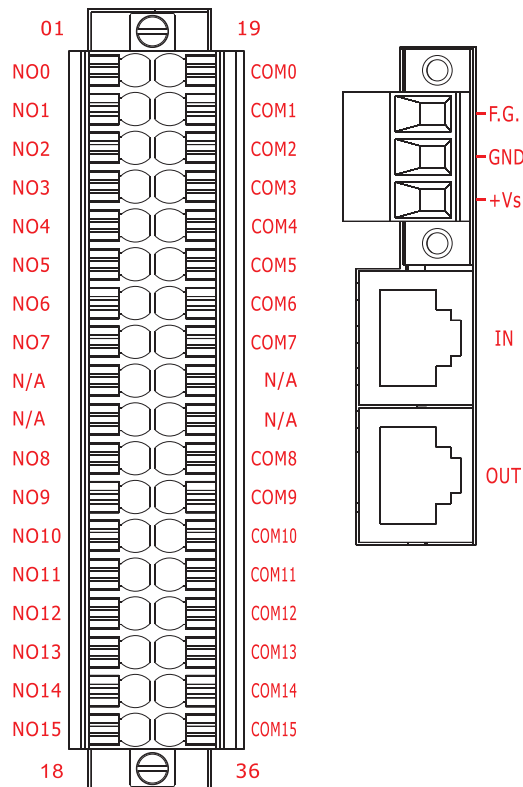
Hardware Specifications

Model	ECAT-2061	
Digital Input		
Channels	16	
Type	Form A (SPST-NO)	
Contact Rating (Resistive Load)	3 A @ 250 V_{AC} (47 ~ 63 Hz) 3 A @ 30 V_{DC}	
Operate Time	10 ms (Max.)	
Release Time	5 ms (Max.)	
Insulation Resistance	1,000 MΩs at 500 V_{DC}	
Dielectric Strength	Between Open Contact	1000 VAC (1 min.)
	Between Coil and Contacts	3000 VAC (1 min.)
Endurance	Mechanical	2×10^7 ops
	Electrical	1×10^5 ops
Power On Value	Yes	
Safe Value	Yes	
Photo-Isolation	3000 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)	140 mm x 112.2 mm x 31 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	

■ Applications

Up to 65535 EtherCAT Slave Units

Daisy Chain

EtherCAT Master Unit

Up to 100 m

Up to 100 m

Relay

Isolated Digital Inputs

Isolated Digital Outputs

Switches, Buttons, ect.

ECAT-2000

Alarms, Fans, Heater, ect.

■ Pin Assignments

01		19
NO0		COM0
NO1		COM1
NO2		COM2
NO3		COM3
NO4		COM4
NO5		COM5
NO6		COM6
NO7		COM7
N/A		N/A
N/A		N/A
NO8		COM8
NO9		COM9
NO10		COM10
NO11		COM11
NO12		COM12
NO13		COM13
NO14		COM14
NO15		COM15
18		36

F.G.
GND
+Vs

IN

OUT

■ Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Relay Output	RLx.COM AC/DC LOAD RLx.NO Relay Close To other channels	RLx.COM AC/DC LOAD RLx.NO Relay Open To other channels

■ Dimensions (Units: mm)

126
112.2
52.2
35.6
59.2
31
140
157

Left Side View   Front View   Right Side View   Rear View   Top View   Bottom View
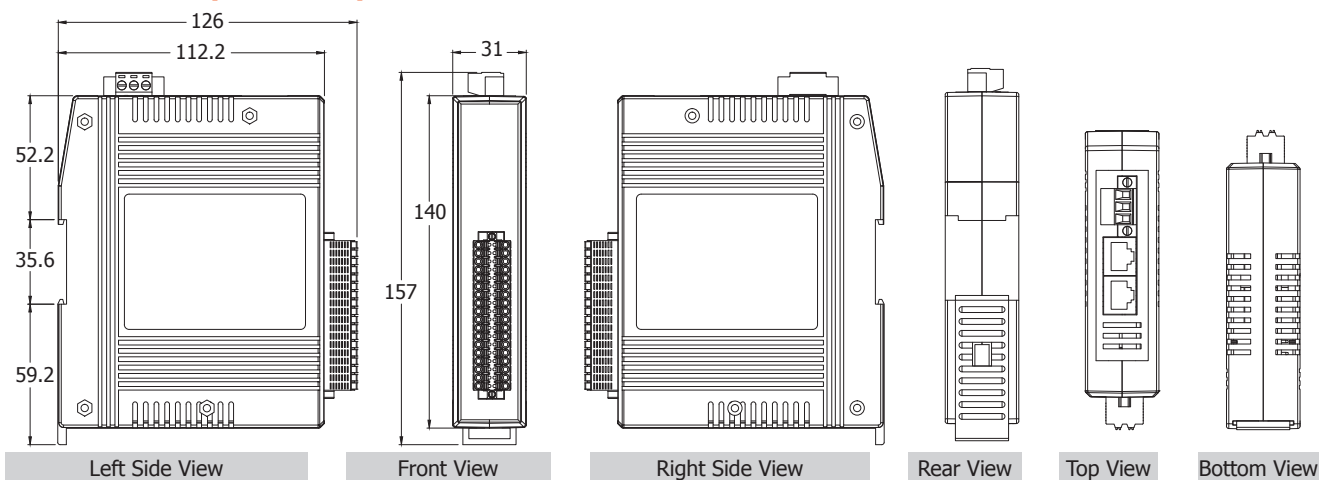
■ Ordering Information

ECAT-2061 CR	EtherCAT Slave I/O Module with Isolated 16-ch Relay DO (RoHS)