ICP DAS

ECAT-2061

EtherCAT Slave I/O Module with Isolated 16-channel 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
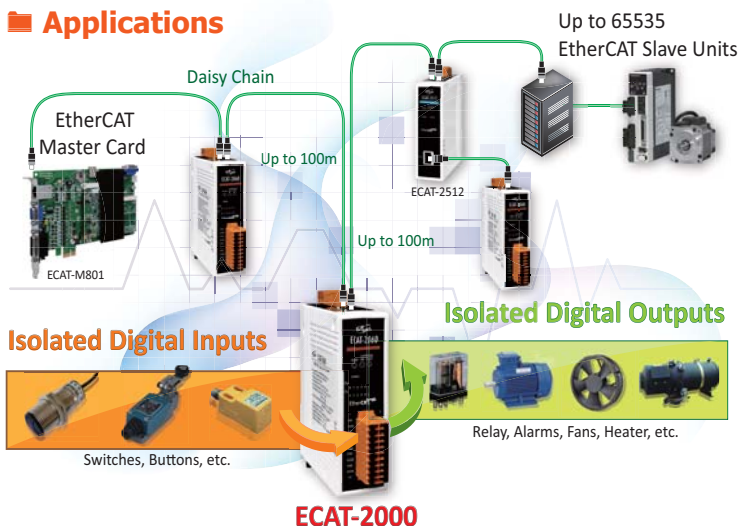
▣ Introduction

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.
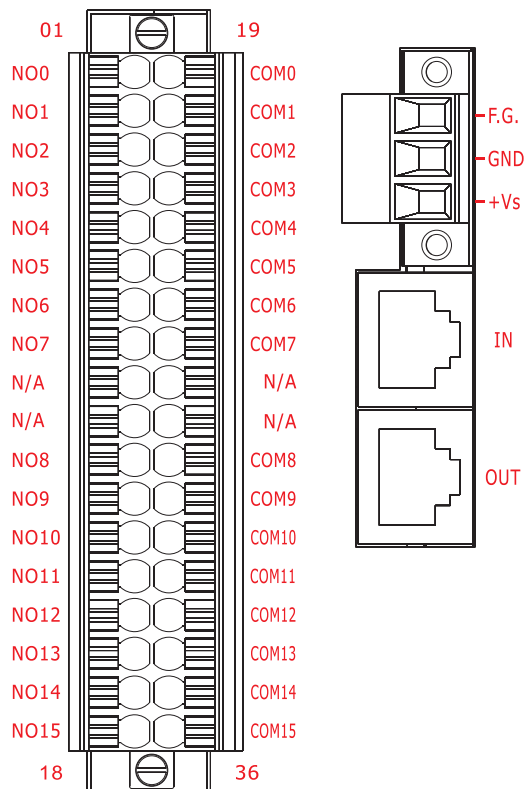
▣ Hardware Specifications

Digital Input		
Channels		16
Type		Form A (SPST-NO)
Contact Rating (Resistive Load)		3 A @ 250 VAC (47 ~ 63 Hz), 3 A @ 30 VDC
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 (W x L x H)		31 mm x 157 mm x 126 mm
Installation		DIN-Rail Mounting
Casing		Plastic
Environment		
Operating Temperature		-25 ~ +75°C
Storage Temperature		-30 ~ +80°C
Relative Humidity		10 ~ 90% RH, Non-condensing

Applications

EtherCAT Master Card

Daisy Chain

Up to 65535 EtherCAT Slave Units

Up to 100m

Up to 100m

ECAT-M801

ECAT-2512

Isolated Digital Inputs

Switches, Buttons, etc.

ECAT-2000

Isolated Digital Outputs

Relay, Alarms, Fans, Heater, etc.

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 — Relay Close AC/DC → LOAD RLx.NO — To other channels	RLx.COM — Relay Open AC/DC × LOAD RLx.NO — 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 |
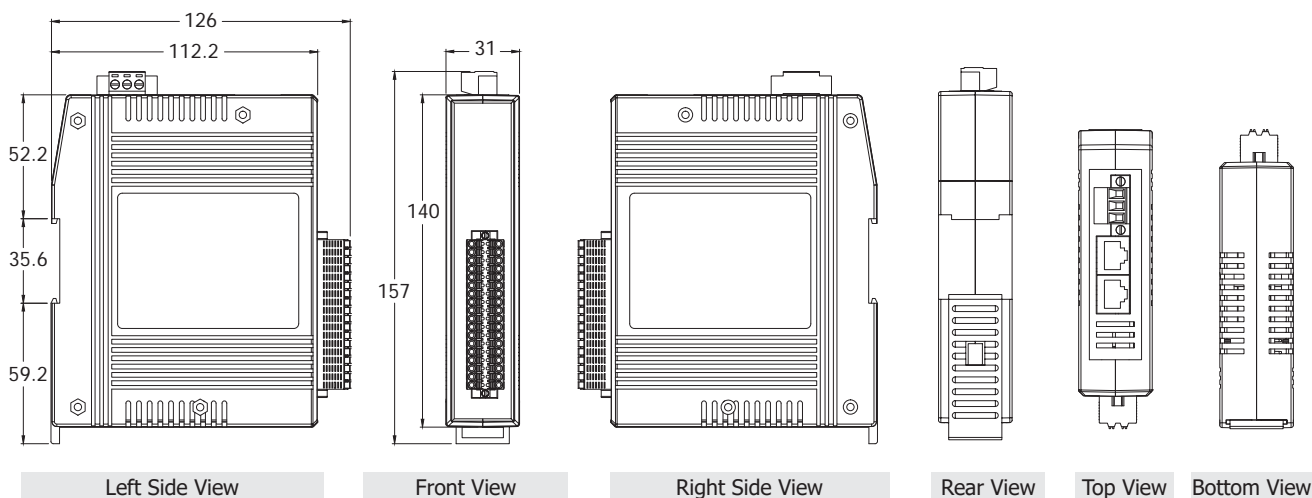
Ordering Information

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