ECAT-2057-32

EtherCAT Slave I/O Module with Isolated 32-channel Digital Outputs

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 32-channel Digital Outputs
- RoHS compliant
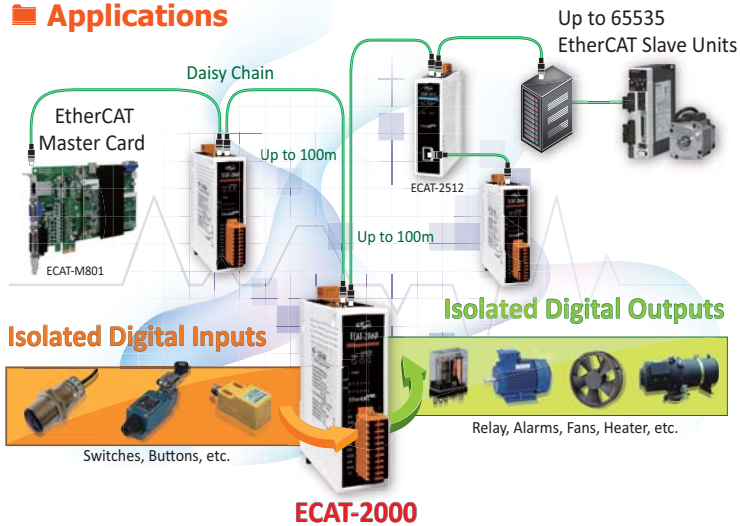- ESD Protection 4 KV Contact for each channel

Introduction

The ECAT-2057-32 is an industrial slave I/O module built in 32 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-2057-32 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.

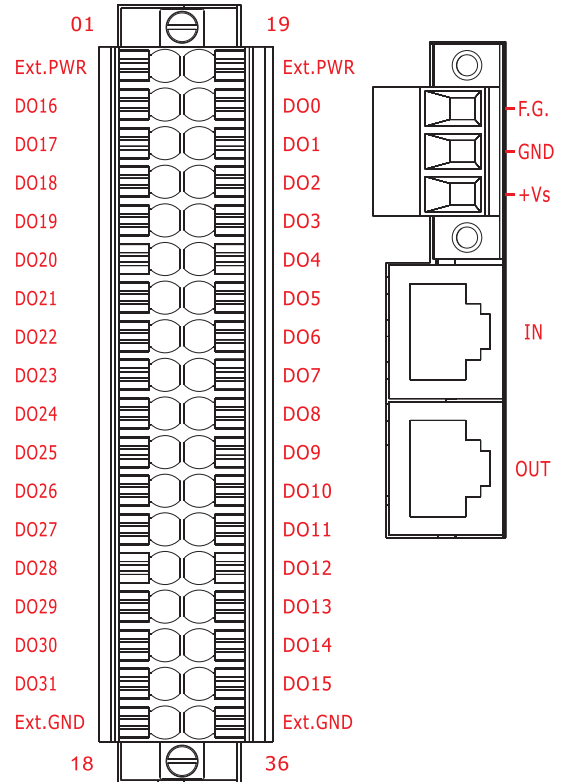* EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

Hardware Specifications

Digital Output	
Channels	32
Output Type	Open Emitter(Source)
Load Voltage	+10 ~ +40 V_{DC}
Max. Load Current	500 mA per channel
Isolation Voltage	2500 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	1.9 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

Up to 65535 EtherCAT Slave Units

Daisy Chain

EtherCAT Master Card

Up to 100m

ECAT-2512

Up to 100m

ECAT-M801

Isolated Digital Inputs

Switches, Buttons, etc.

ECAT-2000

Isolated Digital Outputs

Relay, Alarms, Fans, Heater, etc.

▣ Pin Assignments

01		19	
Ext.PWR		Ext.PWR	
DO16		DO0	
DO17		DO1	
DO18		DO2	
DO19		DO3	
DO20		DO4	
DO21		DO5	
DO22		DO6	
DO23		DO7	
DO24		DO8	
DO25		DO9	
DO26		DO10	
DO27		DO11	
DO28		DO12	
DO29		DO13	
DO30		DO14	
DO31		DO15	
Ext.GND		Ext.GND	
18		36	

F.G.
GND
+Vs

IN

OUT

▣ Wire Connections

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)

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
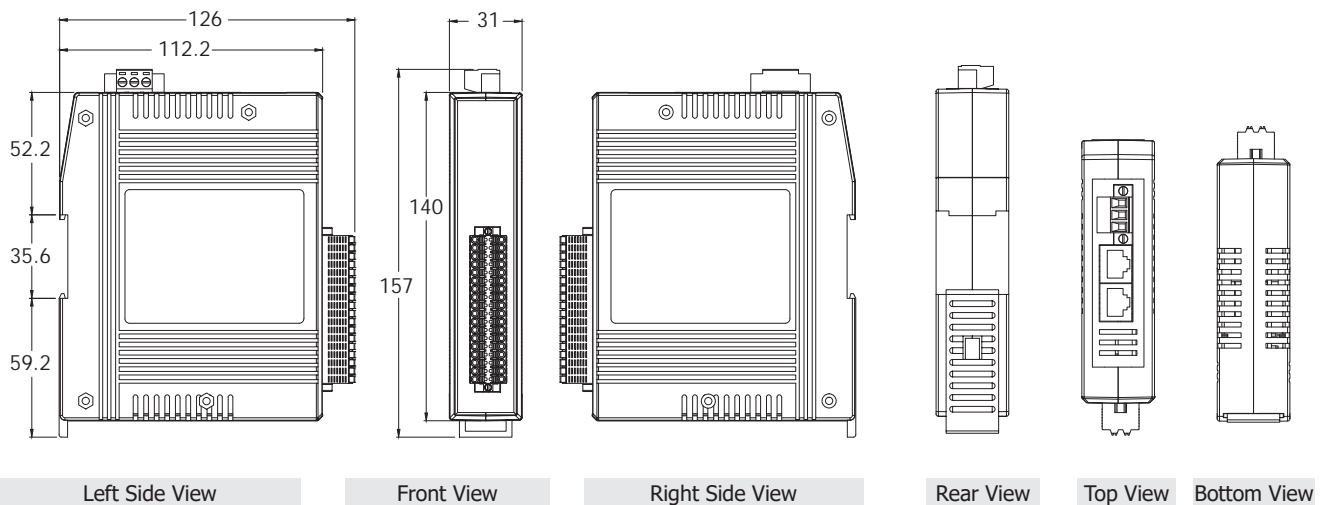
▣ Ordering Information

ECAT-2057-32 CR	EtherCAT Slave I/O Module with Isolated 32-channel Digital Outputs (RoHS)