

ECAT-2045/ECAT-2057/ECAT-2057-NPN

EtherCAT Slave I/O Module with Isolated 16-ch 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 16-ch digital outputs
- RoHS compliant
- ESD Protection 4 KV Contact for each channel

Introduction

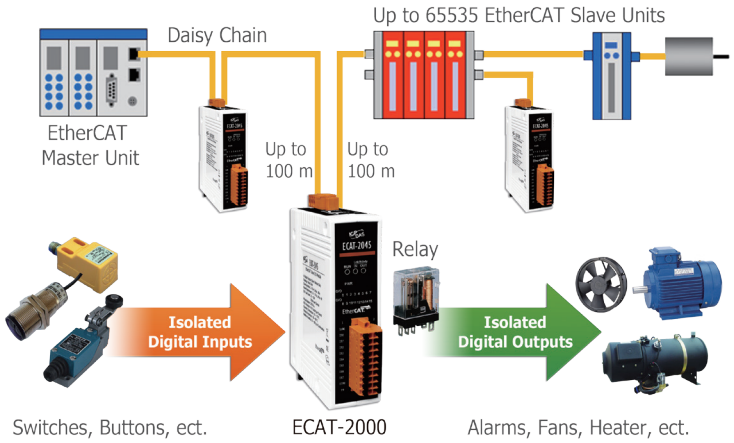
The ECAT-2045 is an industrial slave I/O module built in 16 digital outputs. It is equipped with the EtherCAT* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2045 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.

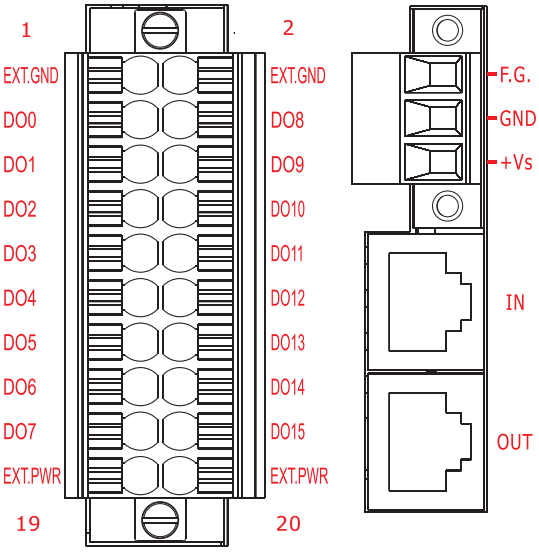
Hardware Specifications

Model	ECAT-2045	ECAT-2057	ECAT-2057-NPN
Digital Output			
Channels	16		
Output Type	Open Collector (Sink)	Open Emmitter (Source)	Open Collector (Sink)
Load Voltage	3.5 ~ 50 V	+3.5 ~ 30 V	
Max. Load Current	700 mA per channel	100 mA per channel	
Isolation Voltage	3750 Vrms		
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 VDC		
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		

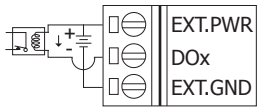
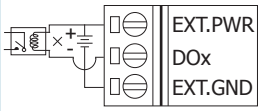
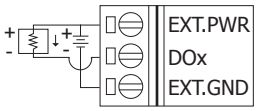
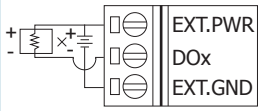
Applications

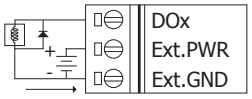
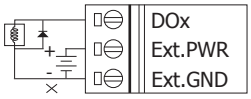
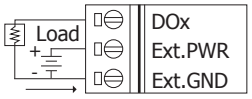
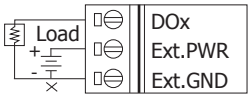


Pin Assignments

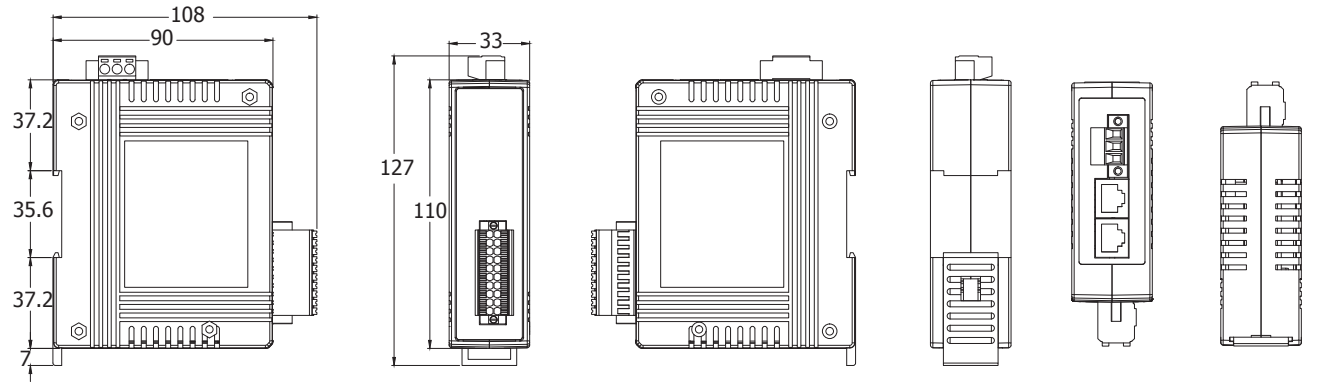


Wire Connections

ECAT-2045 / ECAT-2057-PNP		
Output Type	**ON State Readback as 1**	**OFF State Readback as 0**
Drive Relay		
Resistance Load		

ECAT-2057		
Output Type	**ON State Readback as 1**	**OFF State Readback as 0**
Drive Relay		
Resistance Load		

Dimensions (Units: mm)



Left Side View | Front View | Right Side View | Rear View | Top View | Bottom View

Ordering Information

ECAT-2045 CR	EtherCAT Slave I/O Module with Isolated 16-ch Digital Outputs (RoHS)
ECAT-2057 CR	EtherCAT Slave I/O Module with Isolated 16-ch Source-type Digital Outputs (RoHS)
ECAT-2057-NPN CR	EtherCAT Slave I/O Module with Isolated 16-ch Digital Outputs (RoHS)