



<b>□</b> 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
CE FE ROHS Z

#### **■ 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.

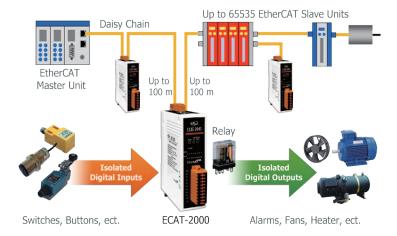
st EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

#### **■ Hardware Specifications** \_

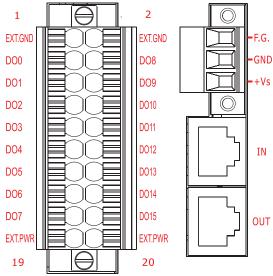
Model	ECAT-2045	ECAT-2057	ECAT-2057-NPN
Digital Output			
Channels	16		
Output Type	Open Collector (Sink)	Open Emmitter (Source)	Open Collector (Sink)
Load Voltage	3.5 ~ 50 V	+3.5 ~ 30 V	
Max. Load Current	700 mA per channel	100 mA per channel	
Isolation Voltage	3750 Vrms		
Communication Interface		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

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### **■ Applications**



### **■ Pin Assignments**



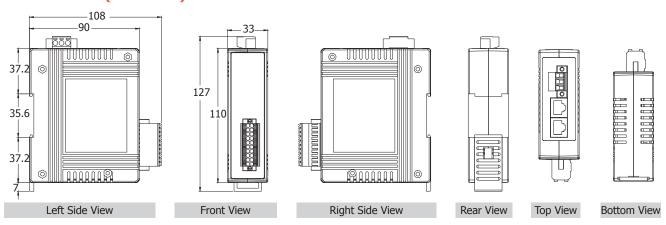
#### **■** Wire Connections \_

ECAT-2045 / ECAT-2057-PNP				
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		

ECAT-2057				
Output Type	ON State Readback as 1	OFF State Readback as 0		
Drive Relay	DOX Ext.PWR Ext.GND	DOX Ext.PWR		
Resistance Load	Load  + DOx Ext.PWR Ext.GND	Load    DOx   Ext.PWR   Ext.GND		

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# ■ Dimensions (Units: mm) \_



# 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)		

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