EtherCAT Series Products

Isolated 8-ch DO and 8-ch DI EtherCAT Slave I/O Module

RoHS CE FC

ECAT-2055

### Dimensions

Left Side View   Front View
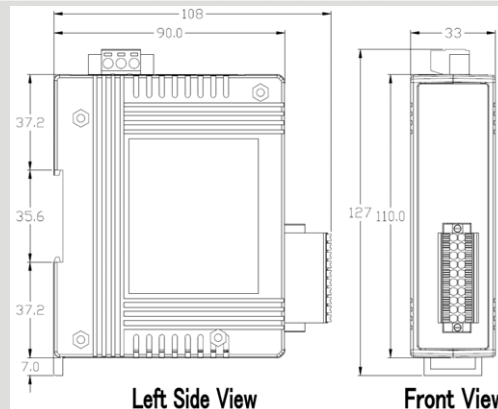
The ECAT-2055 is an industrial slave I/O module built in 8 digital inputs and 8 digital outputs. It is equipped with the EtherCAT* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2055 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.

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 (100BASE-TX)
- Support daisy chain connection
- EtherCAT conformance test tool verified
- Removable terminal block connector
- LED indicators for the I/O status
- Built-In Inputs and Outputs: 8 DI and 8 DO
- RoHS compliant
- ESD Protection 4 KV Contact for each channel
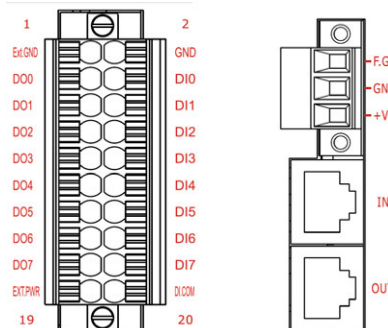
Application

Pin Assignment

Wire connection
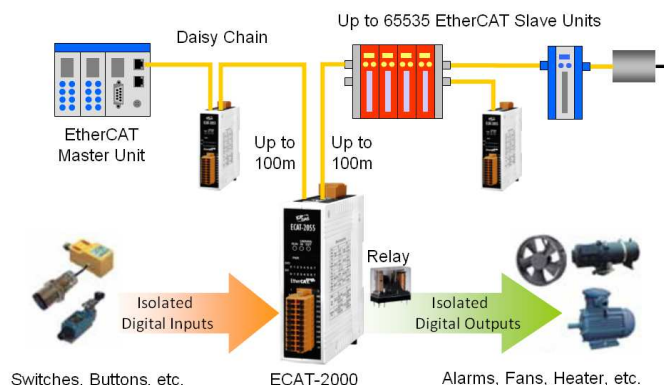
Hardware Specifications

Digital Input		
Channels	8	
Input Type	Dry (Source)	Wet (Sink/Source)
OFF Voltage Level	Open	+4 V Max.
ON Voltage Level	Close to GND	+10 V ~ +50 V
Photo-Isolation	3750 V_{DC}	

Digital Output	
Channels	8
Output Type	Open Collector (Sink)
Load Voltage	+3.5 ~ 50 V
Max. Load Current	700mA per channel
Isolation Voltage	3750 V_{rms}

Communication Interface	
Connector	2 x RJ-45
Protocol	EtherCAT
Distance between Stations	Max. 100 m (100BASE-TX)
Data Transfer Medium	Ethernet/EtherCAT Cable (Min. CAT 5), Shielded

Power	
Input Voltage Range	10V ~ 30V_{DC}
Power Consumption	Max. 4W

Mechanism	
Installation	DIN-Rail
Dimensions	110mm x 90mm x 33mm (H x W x D, without connectors)
Case Material	UL 94V-0 Housing

Environment	
Operating Temperature	-25℃ ~ 75℃
Storage Temperature	-30℃ ~ 80℃
Relative Humidity	10 ~ 90%, No Condensation
ESD (IEC 61000-4-2)	4 KV Contact for Each Channel
EFT (IEC 61000-4-4)	Signal: 1 KV Class A; Power: 1 KV Class A
Surge (IEC 61000-4-5)	1 KV Class A

Ordering Information

ECAT-2055 CR	EtherCAT Slave I/O Module with Isolated 8-ch DO and 8-ch DI (RoHS)