

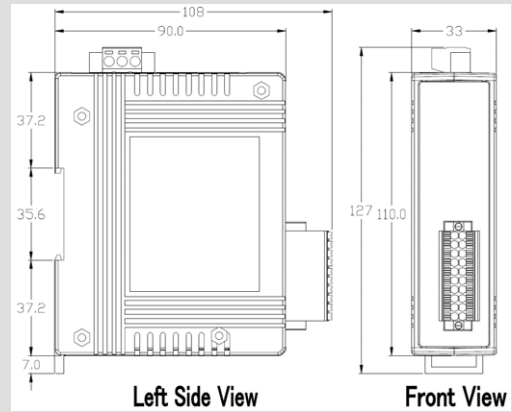


# EtherCAT Series Products

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



**ECAT-2055**



**Dimensions**

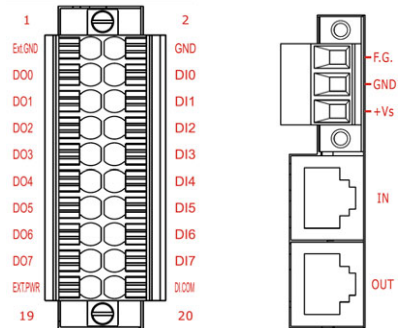
The ECAT-2055 is an industrial slave I/O module built in 8 digital inputs and 8 digital outputs. It is equipped with the EtherCAT\* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process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

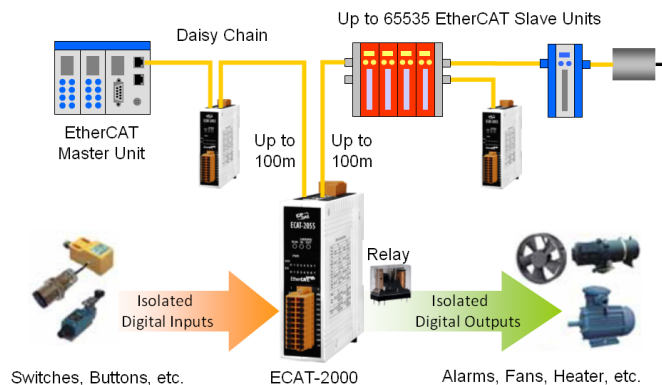
### Features

- 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

### Pin Assignment



### Application



### Wire connection

| Output               | ON | OFF |
|----------------------|----|-----|
| Drive Relay          |    |     |
| Resistance Load      |    |     |
| Input                | ON | OFF |
| Relay Contact (Dry)  |    |     |
| Open Collector (Dry) |    |     |
| Relay Contact (Wet)  |    |     |
| NPN Output (Wet)     |    |     |



## Hardware Specifications

| Digital Input             |   |                   |
|---------------------------|---|-------------------|
| Channels                  | 8   |                   |
| Input Type                | Dry (Source)  | Wet (Sink/Source) |
| OFF Voltage Level         | Open  | +1.4 V Max.       |
| ON Voltage Level          | Close to GND  | +10 V ~ +50 V     |
| Photo-Isolation           | 3750 VDC  |                   |
| 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 <sub>rms</sub>                               |                   |
| 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 ~ 30VDC   |                   |
| 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°C ~ 75°C  |                   |
| Storage Temperature       | -30°C ~ 80°C  |                   |
| 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

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