

EtherCAT®



## ECAT-2050

EtherCAT Slave I/O Module with Isolated 4-channel Source or Sink type Digital Outputs and 13-channel Digital Inputs

### 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 input status
- Built-In isolated 4-channel source or sink type digital outputs and 13-channel digital inputs
- RoHS compliant
- ESD Protection 4 KV Contact for each channel



### Introduction

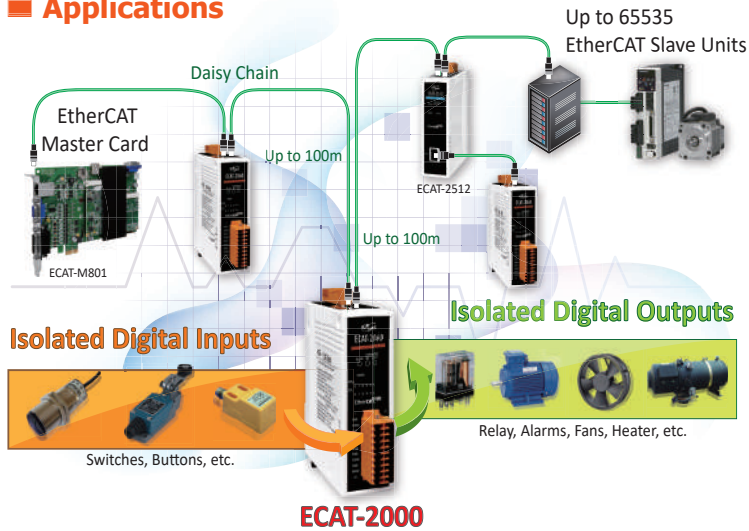
The ECAT-2050 is an industrial slave I/O module built in 4 source or sink type digital outputs and 13 digital inputs. It is equipped with the EtherCAT\* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2050 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.

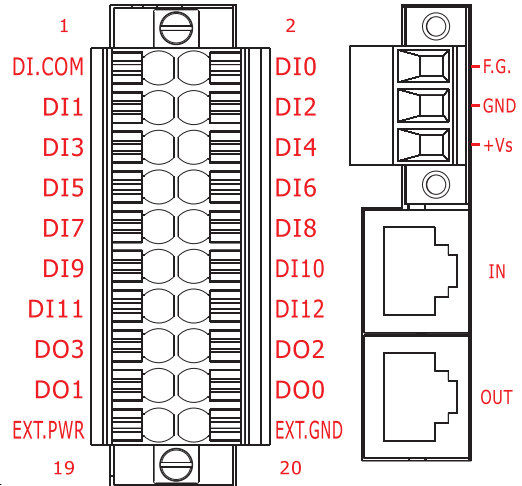
### Hardware Specifications

Digital Input		
Channels		13
Input Type		Wet (Sink/Source)
Wet Contact	ON Voltage Level	+10 V ~ +50 V
	OFF Voltage Level	+4 V Max.
Photo-Isolation		3750 Vdc
Digital Output		
Channels		4
Output Type		Open Collector (Sink ,NPN/Source ,PNP) (Jumper Selectable)
Load Voltage		+3.5 ~ +30 V
Max. Load Current		100 mA per channel
Isolation Voltage		3750 Vdc
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		4.5 W Max.
Mechanical		
Dimensions (W x L x H)		33mm x 127 mm x 108 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



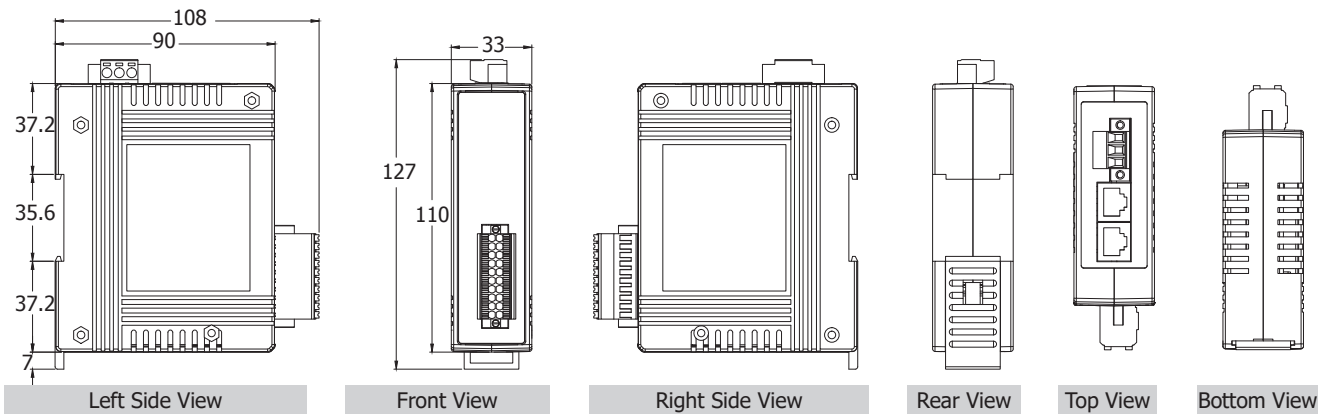
## Wire Connections

Digital Input /Counter	Readback as 1	Readback as 0
Sink	+10 ~ +50 VDC 	OPEN or <4 VDC 
	+10 ~ +50 VDC 	OPEN or <4 VDC 

Output Type	Open Collector (Sink)		Jumper Selectable
	ON State Readback as 1	OFF State Readback as 0	
Drive Relay			JP2~JP5 
Resistance Load			

Output Type	Open Emitter (Source)		Jumper Selectable
	ON State Readback as 1	OFF State Readback as 0	
Inductive Load			JP2~JP5 
Resistance Load			

## Dimensions (Units: mm)



## Ordering Information

<b>ECAT-2050 CR</b>	EtherCAT Slave I/O Module with Isolated 4-channel Source or Sink type Digital Outputs and 13-channel Digital Inputs (RoHS)
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