

EtherCAT®



ECAT-2050

EtherCAT SubDevice 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 (100BASE-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
- ESD Protection 4 KV Contact for each channel



Introduction

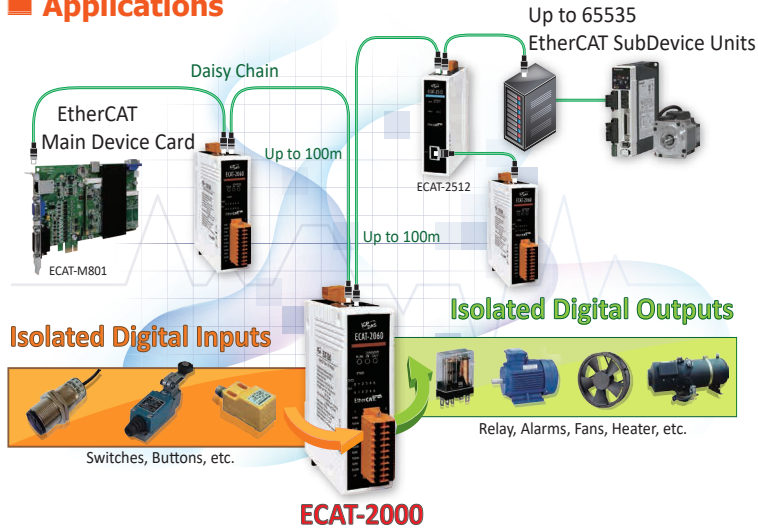
The ECAT-2050 is an industrial SubDevice I/O module built in 4 source or sink type digital outputs and 13 digital inputs. It is equipped with the EtherCAT* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status 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 Main Device 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.

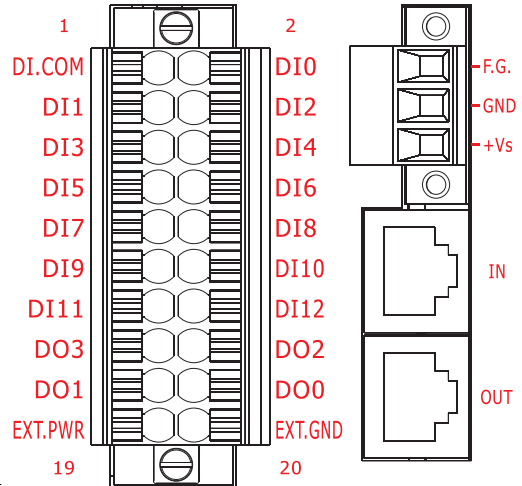
Hardware Specifications

Digital Input	
Channels	13
Input Type	Wet (Sink/Source)
Wet Contact	ON Voltage Level OFF Voltage Level
	+5 V ~ +50 V +2 V Max.
Photo-Isolation	3750 VDC
Digital Output	
Channels	4
Output Type	Open Collector (Sink ,NPN/Source ,PNP) (Jumper Selectable)
Load Voltage	+5 ~ +30 V
Max. Load Current	100 mA per channel
Isolation Voltage	3750 VDC
EtherCAT	
Ports	2 x RJ-45
Distance Between Stations	100 m Max. (100BASE-TX)
Data Transfer Medium	Ethernet/EtherCAT Cable (Min. CAT 5), Shielded
Cycle Time	200 us
Distributed Clocks	Yes
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
Casing	Plastic
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Relative Humidity	10 ~ 90% RH, Non-condensing

Applications



Pin Assignments



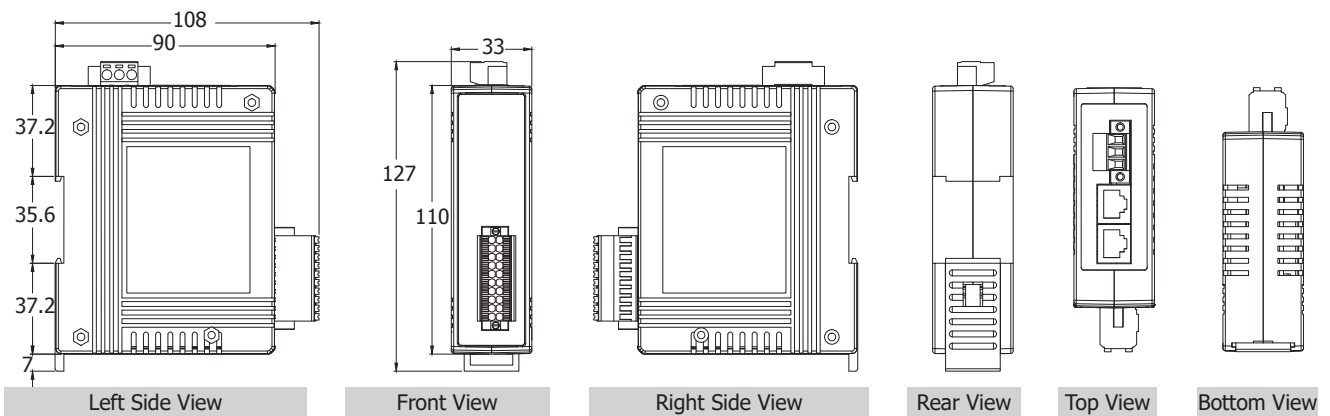
Wire Connections

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

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