



### 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 16 digital inputs
- RoHS compliant
- ESD Protection 4 KV Contact for each channel

## Introduction

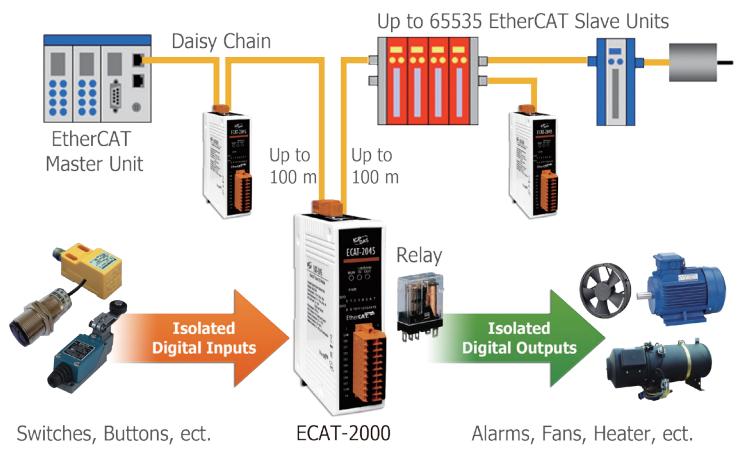
The ECAT-2051 is an industrial slave I/O module built in 16 digital inputs. It is equipped with the EtherCAT\* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2051 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.

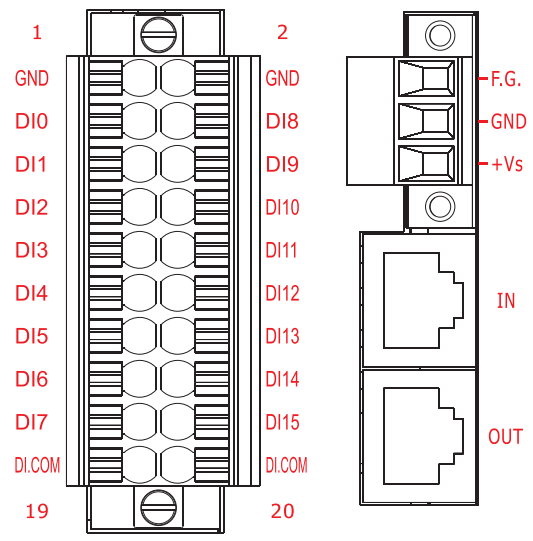
## Hardware Specifications

Model	ECAT-2051	ECAT-2053
<b>Digital Input</b>		
Channels	16	
Input Type	Wet (Sink/Source)/ Dry (Source)	Wet (Sink/Source)
Wet Contact	ON Voltage Level	+4 V Max.
	OFF Voltage Level	+10 V ~ +50 V
Dry Contact	ON Voltage Level	Open
	OFF Voltage Level	Close to GND
Photo-Isolation	3750 Vdc	
<b>Communication Interface</b>		
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	
<b>EMS Protection</b>		
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	
<b>Power</b>		
Input Voltage Range	10 ~ 30 Vdc	
Power Consumption	4 W Max.	
<b>Mechanical</b>		
Dimensions (H x W x D)	110 mm x 90 mm x 33 mm	
Installation	DIN-Rail Mounting	
Case Material	UL 94V-0 Housing	
<b>Environment</b>		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-30 ~ +80°C	
Relative Humidity	10 ~ 90% RH, Non-condensing	

### Applications



### Pin Assignments

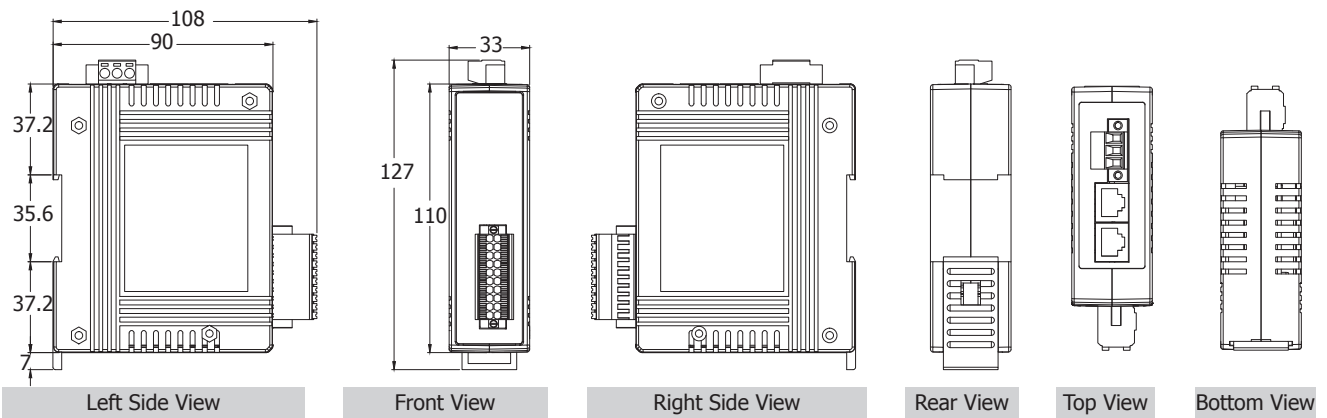


### Wire Connections

ECAT-2051 / ECAT-2053		
Digital Input/Counter	Readback as 1	Readback as 0
	+10 ~ +50 VDC	OPEN or <4 VDC
Sink		
	+10 ~ +50 VDC	OPEN or <4 VDC
Source		

ECAT-2051		
Digital Input/Counter	Readback as 1	Readback as 0
	Close to GND	Open
Dry		

### Dimensions (Units: mm)



### Ordering Information

<b>ECAT-2051 CR</b>	EtherCAT Slave I/O Module with Isolated 16-ch DI (RoHS)
<b>ECAT-2053 CR</b>	EtherCAT Slave I/O Module with Isolated 16-ch DI (RoHS)