

# **EtherCAT Series Products**

#### Isolated 16-ch DI EtherCAT Slave I/O Module

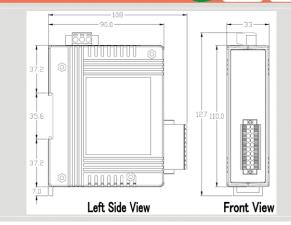








ECAT-2051



**Dimensions** 

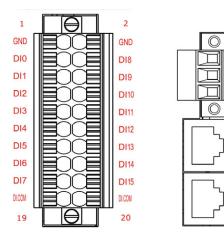
The ECAT-2051 is an industrial slave I/O module built in 16 digital inputs. It is equipped with the EtherCAT\* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from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

\* EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

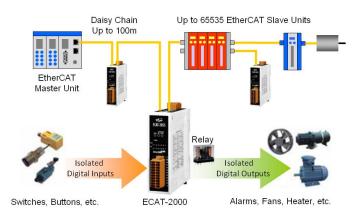
#### **Features**

- 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 input status
- Built-In isolated 16 digital inputs
- RoHS compliant
- ESD Protection 4 KV Contact for each channel

#### **Pin Assignment**



#### Application Wire connection



Input	ON	OFF
Relay Contact (Dry)	Relay DIx Close GND	Relay DIx Open GND
Open Collector (Dry)	ON ⊀↓ □⊖ DIX GND	OFF-K↓X □⇒ DIX GND
Relay Contact (Wet)	+ ☐ □ DI.COM DIX	+ DI.COM DIX
NPN Output (Wet)	ON KILTURE DI.COM DIX	OFF DI.COM DIX





## Hardware Specifications

Digital Input				
Channels	16			
Input Type	Dry (Source)	Wet (Sink/Source)		
Dry Contact Level	Open	+4 V Max.		
Wet Contact Level	Close to GND	+10 V ~ +50 V		
Photo-Isolation	3750 VDC			
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

**ECAT-2051 CR** 

EtherCAT Slave I/O Module with Isolated 16-ch Digital Inputs (RoHS)