

The ECAT-2053 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-2053 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.

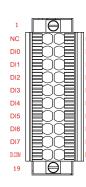
\* EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

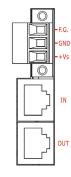
### **Features**

- 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**





## Wire connection

Relay	+ □⊖ DI.COM	+ DI.COM
Contact		DIx
(Wet)	Relay Close □⊖ DIx	Relay Open
NPN Output (Wet)		

0110

DI12

0114

# Hardware Specifications



Digital Input				
Channels	16			
Input Type	Wet (Sink/Source)			
OFF Voltage Level	+2 V Max.			
ON Voltage Level	+3.5 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	$10V \sim 30VDC$			
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	$10 \sim 90\%$ , 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-2053 CR

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