

ECAT-2052-NPN

Dimensions

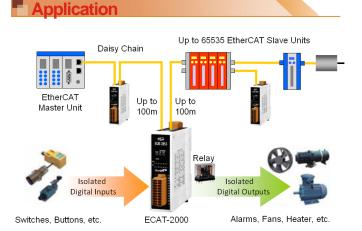
Left Side View

The ECAT-2052-NPN is an industrial slave I/O module built in 8 digital inputs and 8 digital outputs. 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-2052-NPN 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.

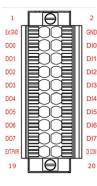
\* EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

#### **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**





Front View

#### Wire connection

Output	ON	OFF
Drive Relay	Ext.PWR DOx Ext.GND	
Resistance Load	±⊡i ±= □ □ □ □ □ □ □ □ □ □	± ±
Input	ON	OFF
Relay Contact (Dry)	Relay BIX Close GND	Relay DIx Open GND
Open Collector (Dry)	ON -K]↓ ⊕ DIx GND	OFF-KI× ⊕ GND
Relay Contact (Wet)	+ - Elay Close □⊖ DI.COM DIx	+ _= Relay Open □⊖ DI.COM DIx
NPN Output (Wet)		

# Hardware Specifications



EtherCAT Series

Digital Input			
Channels	8		
Input Type	Wet (Sink/Source)		
OFF Voltage Level	+2 V Max.		
ON Voltage Level	+3.5 V ~ +50 V		
Photo-Isolation	3750 VDC		
Digital Output			
Channels	8		
Output Type	Open Collector (Sink)		
Load Voltage	+3.5 ~ 50 V		
Max. Load Current	100mA per channel		
Isolation Voltage	3750 Vrms		
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-2052NPN CR

EtherCAT Slave I/O Module with Isolated 8-ch DO and 8-ch DI (RoHS)