

EtherCAT<sup>®</sup>



## ECAT-2045-32/ECAT-2045K-32

EtherCAT SubDevice I/O Module with Isolated 32-channel Digital Outputs

### 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 output status
- Built-In isolated 32-channel digital outputs
- Keep output values after state machine change (only for ECAT-2045K-32)
- ESD Protection 4 kV Contact for each channel



### Introduction

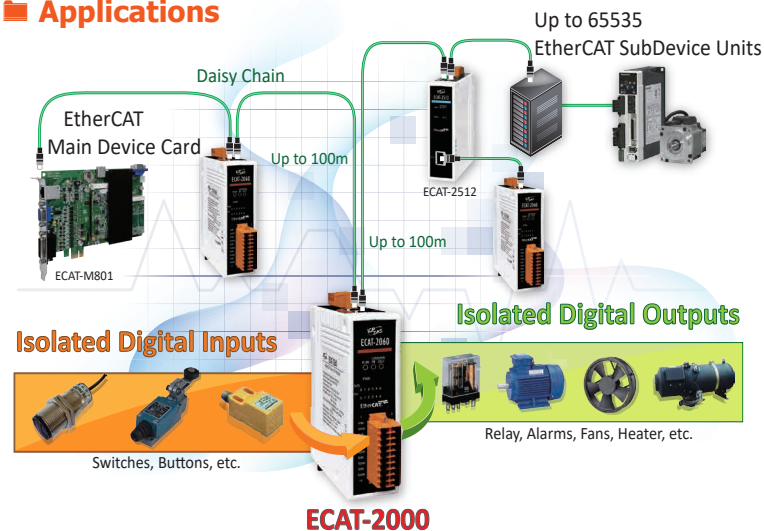
The ECAT-2045-32/ECAT-2045K-32 is an industrial SubDevice I/O module built in 32 digital outputs. It is equipped with the EtherCAT\* protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. Users can obtain the input and output status not only via the process data but also from its LED indicators. The ECAT-2045-32/ECAT-2045K-32 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<sup>®</sup> is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

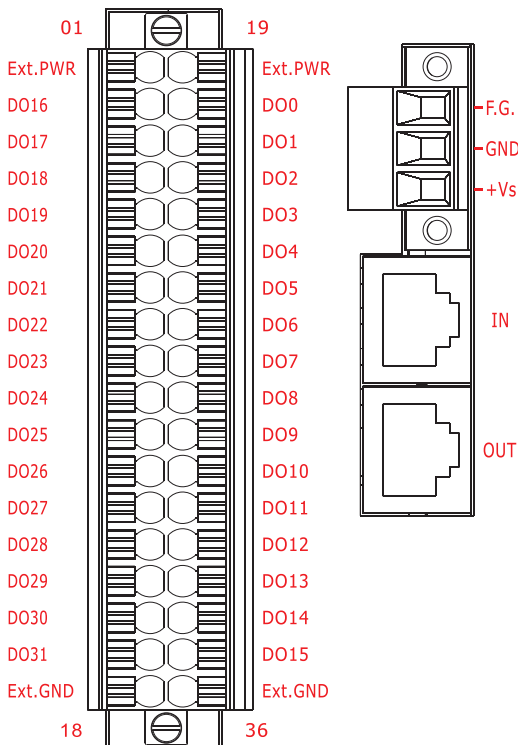
### Hardware Specifications

Digital Output	
Channels	32
Output Type	Open Collector (Sink ,NPN)
Load Voltage	+3.5 ~ +50 V
Max. Load Current	500 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	1 ms
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 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 157 mm x 126 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

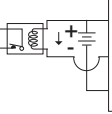
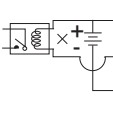
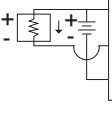
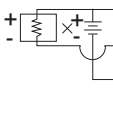
## Applications



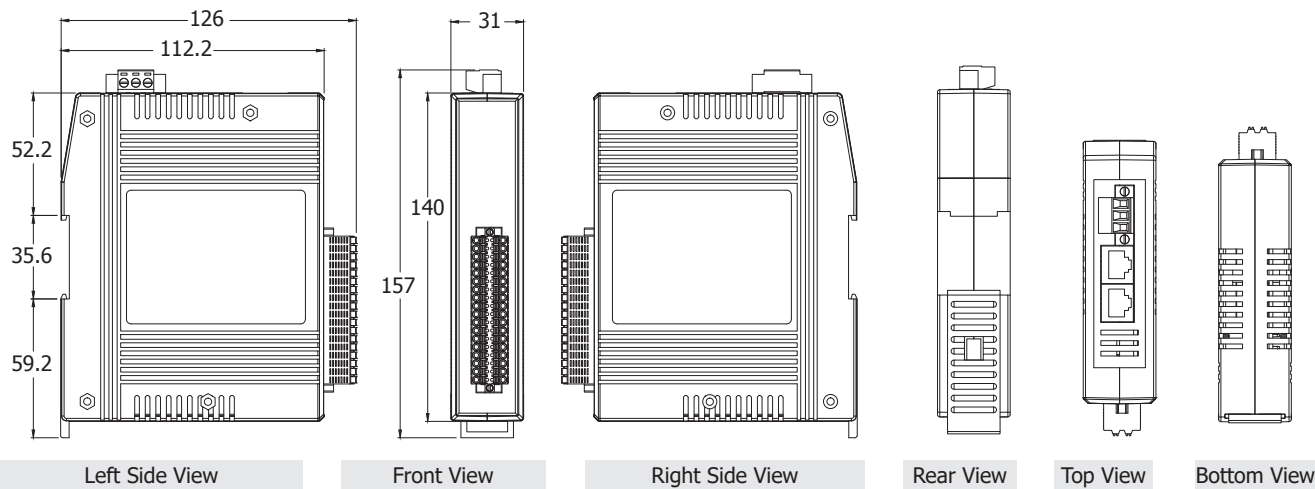
## Pin Assignments



## Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay	 <div> <div>EXT.PWR</div> <div>DOx</div> <div>EXT.GND</div> </div>	 <div> <div>EXT.PWR</div> <div>DOx</div> <div>EXT.GND</div> </div>
Resistance Load	 <div> <div>EXT.PWR</div> <div>DOx</div> <div>EXT.GND</div> </div>	 <div> <div>EXT.PWR</div> <div>DOx</div> <div>EXT.GND</div> </div>

## Dimensions (Units: mm)



## Ordering Information

<b>ECAT-2045-32 CR</b>	EtherCAT SubDevice I/O Module with Isolated 32-channel Digital Outputs (RoHS)
<b>ECAT-2045K-32 CR</b>	EtherCAT SubDevice I/O Module with Isolated 32-channel Digital Outputs (Keep output value) (RoHS)