



## EC1-P16C16

EtherCAT Slave I/O Module with Isolated 16-channel Digital Inputs and 16-channel Digital Outputs

### Features

- On the fly processing: EtherCAT
- Powerful MCU handles efficient network traffic
- Maximum distance between Stations can be up to 100 m (100BASE-TX)
- Support daisy chain and star connection
- EtherCAT conformance test tool verified
- LED indicators for the I/O status
- Built-In Inputs and Outputs: 16 DI and 16 DO
- Configurable Power-on Value Settings
- Keep output values after state machine change
- Low Pass Filter
- ESD Protection 4 KV Contact for each channel



### Introduction

The EC1-P16C16 is an industrial slave I/O module built in 16 digital inputs and 16 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 EC1-P16C16 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.

### Specifications

EMS Protection	
EFT (IEC 61000-4-4)	Signal: 1 KV Class B; Power: 1 KV Class B
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal
Surge (IEC 61000-4-5)	± 1 kV Class A
Digital Input	
Channels	16
Type	Wet (Sink & Source )/ Dry (Source)
ON Voltage Level	Wet Contact: +10 V ~ +24 V Dry Contact: Close to GND
OFF Voltage Level	Wet Contact :+4 V Max. Dry Contact: Open
Isolation	3750 VDC
Digital Output	
Channels	16
Type	Open Collector (Sink),with internal flywheel diode
Load Voltage	40 VDC Max.
Load Current	500mA/Channel(Sink)
Isolation	3000 VDC
EtherCAT	
Distance Between Stations	Max. 100 m (100Base-Tx)
Data Transfer Medium	Ethernet/EtherCAT cable (min. CAT5), shielded
Cycle Time	100 us
Distributed Clocks	Yes
Node ID	Up to 256

## Specifications

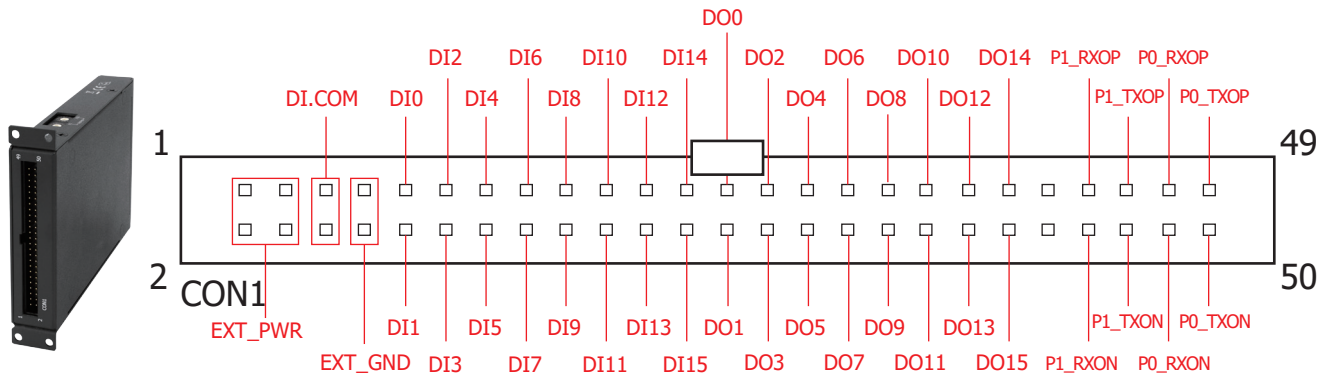
Power	
Input Range	+24 VDC
Consumption	3 W
Mechanical	
Casing	Metal with IP40
Dimensions (mm)	20 x 98 x 120 (W x L x D)
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

## Wire Connections

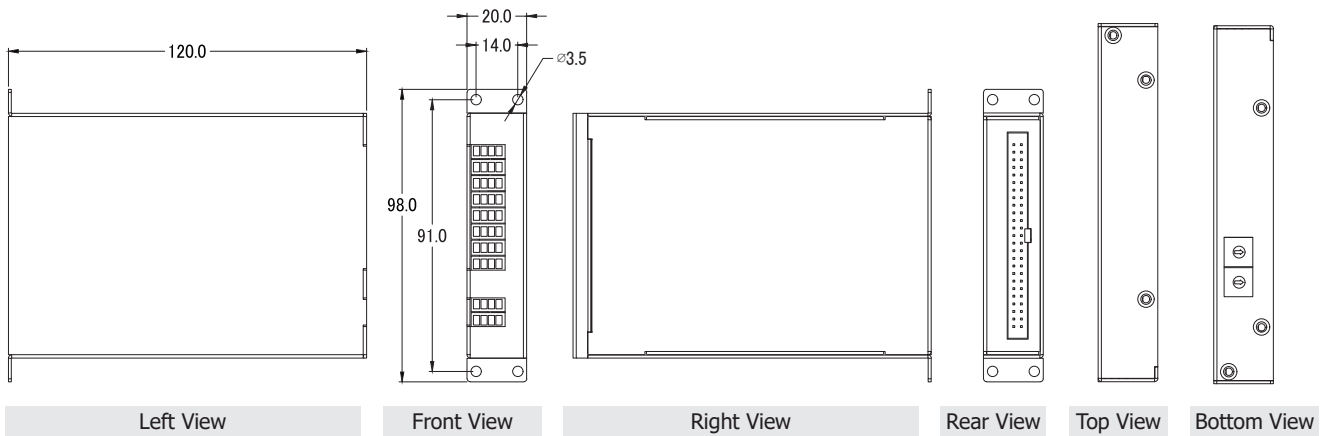
Digital Input/Counter	Readback as 1	Readback as 0
Sink	+10 ~ +24V 	OPEN or <4 VDC 
	Source	+10 ~ +24V 
Dry Contact		Close to GND 

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

## Pin Assignments



## Dimensions (Units: mm)



## Ordering Information

<b>EC1-P16C16 CR</b>	EtherCAT Slave I/O Module with Isolated 16-channel Digital Inputs and 16-channel Digital Outputs (RoHS)
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