



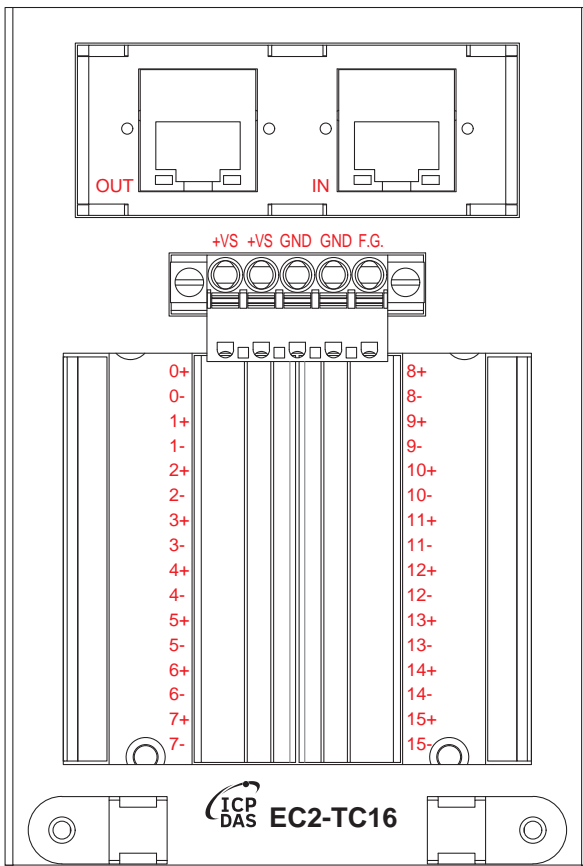
EC2-TC16

EtherCAT Slave I/O Module with 16-channel Thermocouple Inputs

Introduction

The EC2-TC16 is an industrial slave I/O module built in 16-ch Thermocouple inputs. That provides 100Hz high-speed measurement and open wire detection for each channel. The module supports a variety of thermocouple input types, including Type J, K, T, E, R, S, B, N, C, L, M, and LDIN43710, and features an automatic cold-junction compensation function for all channels. It is equipped with the EtherCAT protocol and installed by daisy chain connection that provides a more scalable system with fewer wires. The EC2-TC16 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.

Pin Assignments



Features

- On the fly processing: EtherCAT
- 2 x RJ-45 bus interface
- Distance between stations up to 100 m (100 BASE-TX)
- Support daisy chain connection
- Built-In 16-channel Thermocouple Inputs



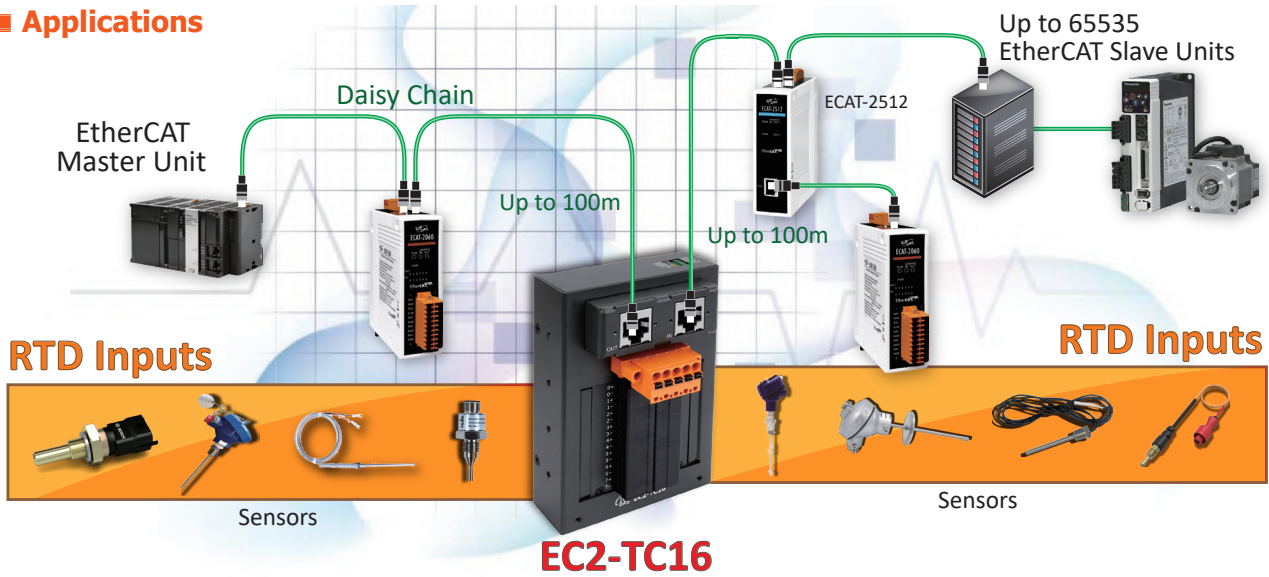
Specifications

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
Analog Input	
Channels	16
Sensor Type	Thermocouple (J, K, T, E, R, S, B, N, C, L, M, LDIN43710)
Resolution	16-bit
Accuracy	±0.1 % of FSR (25°C)
Sampling Rate	100 Hz (per channel)
Overvoltage Protection	30 VDC
Individual Channel Configuration	Yes
Open Wire Detection	Yes
EtherCAT	
Ports	EtherCAT, 2 X RJ45
Distance Between Stations	Max. 100 m (100 Base-Tx)
Data Transfer Medium	Ethernet/EtherCAT cable (min. CAT5), shielded
Cycle Time	100 us
Distributed Clocks	Yes
Node ID	Up to 256
Power	
Input Range	+24 VDC
Consumption	3 W
Mechanical	
Casing	Metal with IP40
Dimensions (mm)	83 x 122 x 65 (W x L x D)
Installation	DIN-Rail or Wall Mounting
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

Ordering Information

EC2-RTD16 CR	EtherCAT Slave I/O Module with 16-channel Thermocouple Inputs (RoHS)
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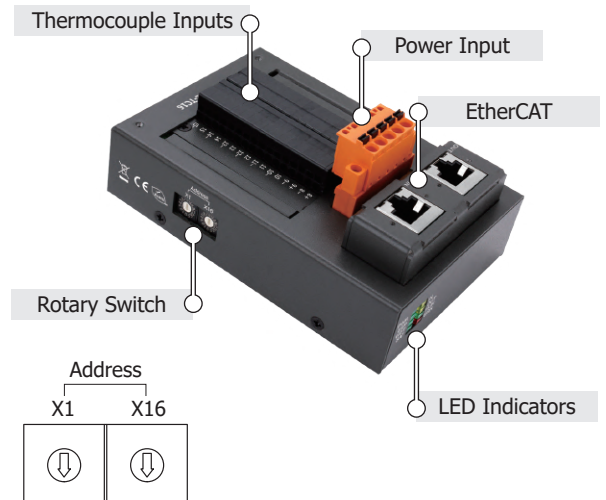
Applications



Thermocouple Type

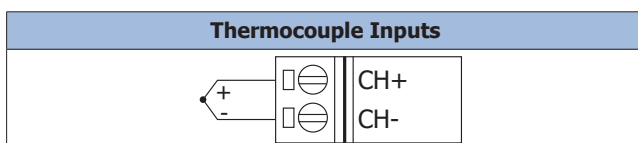
Type Code	Temperature
J	-210 ~ +760°C
K	-270 ~ +1372°C
T	-270 ~ +400°C
E	-270 ~ +1000°C
R	0 ~ +1768°C
S	0 ~ +1768°C
B	0 ~ +1820°C
N	-270 ~ +1300°C
C	0 ~ +2320°C
L	-200 ~ +800°C
M	-200 ~ +100°C
LDIN43710	-200 ~ +900°C

Appearance



Rotary Switch is Hex
Address is double digits
X16 is High digit
X1 is Low digit

Wire Connections



Dimensions (Units: mm)

