

EtherCAT[®]



ECAT-2517

8 Port EtherCAT Junction SubDevice Module

Features

- Maximum distance between Stations can be up to 100 m (100BASE-TX)
- Support daisy chain and star connection
- EtherCAT conformance test tool verified
- ESD Protection 4 KV Contact for each port



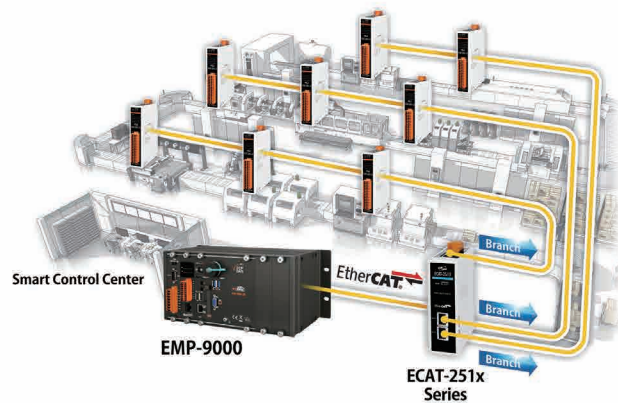
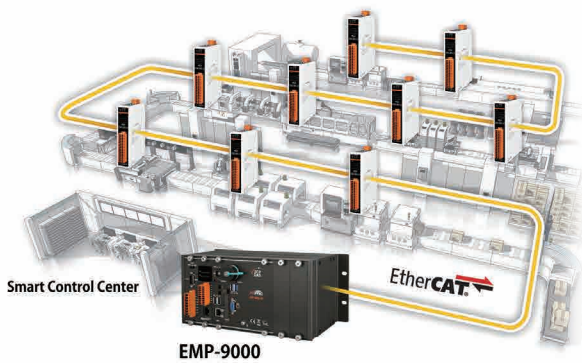
Introduction

ECAT-2517 is 1-to-7 port EtherCAT junction SubDevice. They are designed for realizing flexible wiring by daisy chain and branch. The ECAT2517 cannot be used as a standard Ethernet switch.

Applications

Benefit 1: Translate Daisy-chain to Branch Topology

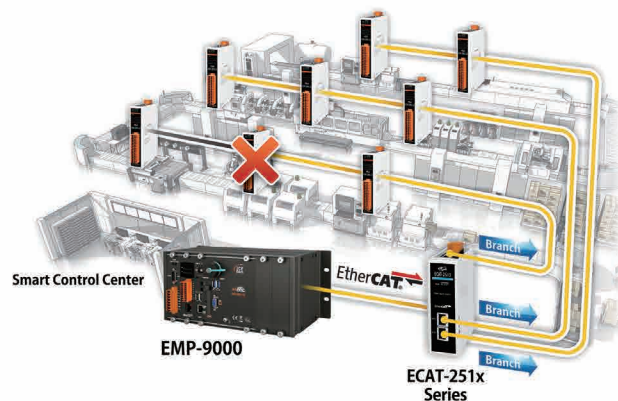
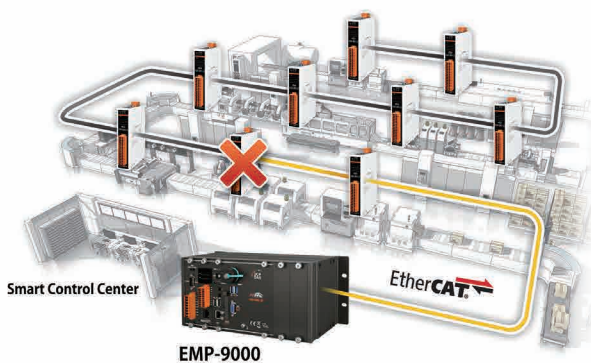
EtherCAT junction slaves can implement wiring in branch topology. The wiring of branch topology is easier than daisy-chain topology.



Benefit 2: Improve the Debugging Efficiency

For daisy-chain topology, if a SubDevice is not working or the cable is disconnected, all SubDevice in the same network will not be able to communicate with the Main Device controller.

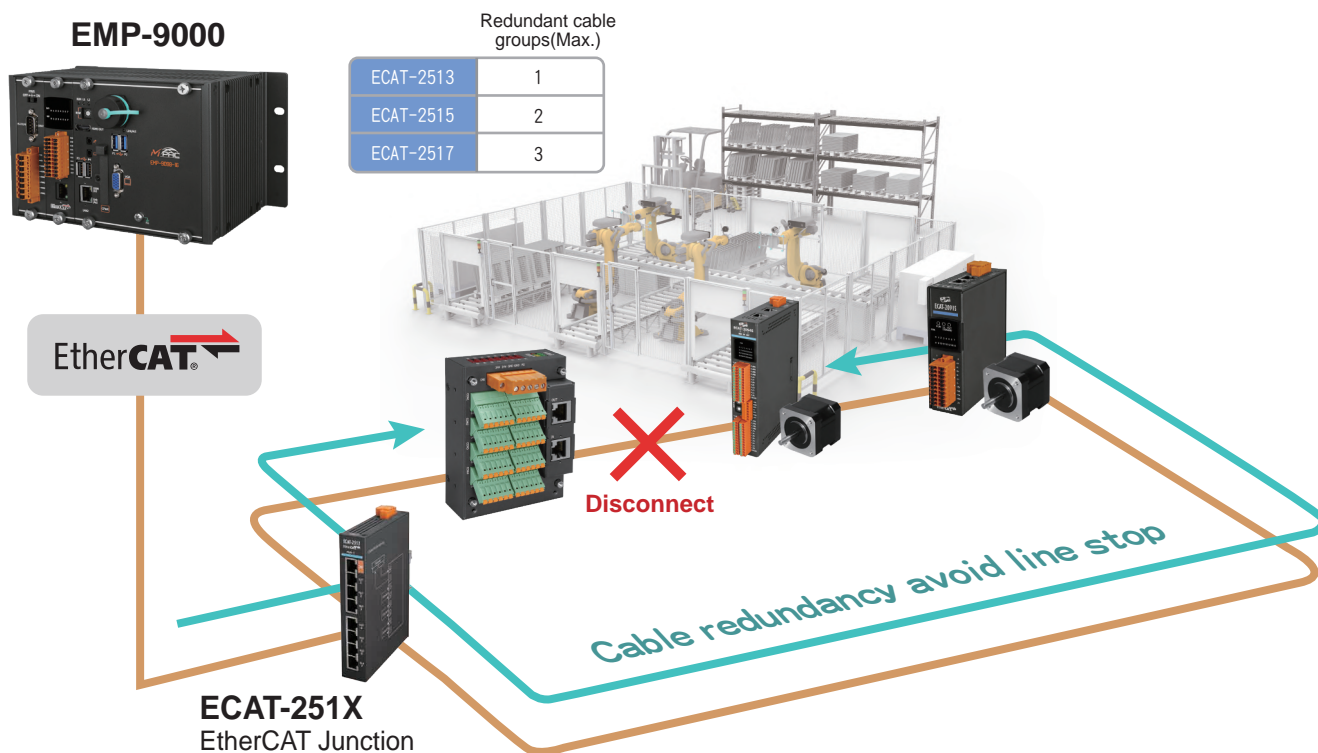
With EtherCAT junction slaves, all SubDevice can be wired as separated sections. If one SubDevice is failed, only the SubDevice in the same section will be affected. With the help of EtherCAT junction SubDevice module, the SubDevice in other sections still can communicate with the Main Device controller. Debugging can be done separately, thus improving the debugging efficiency.



Applications

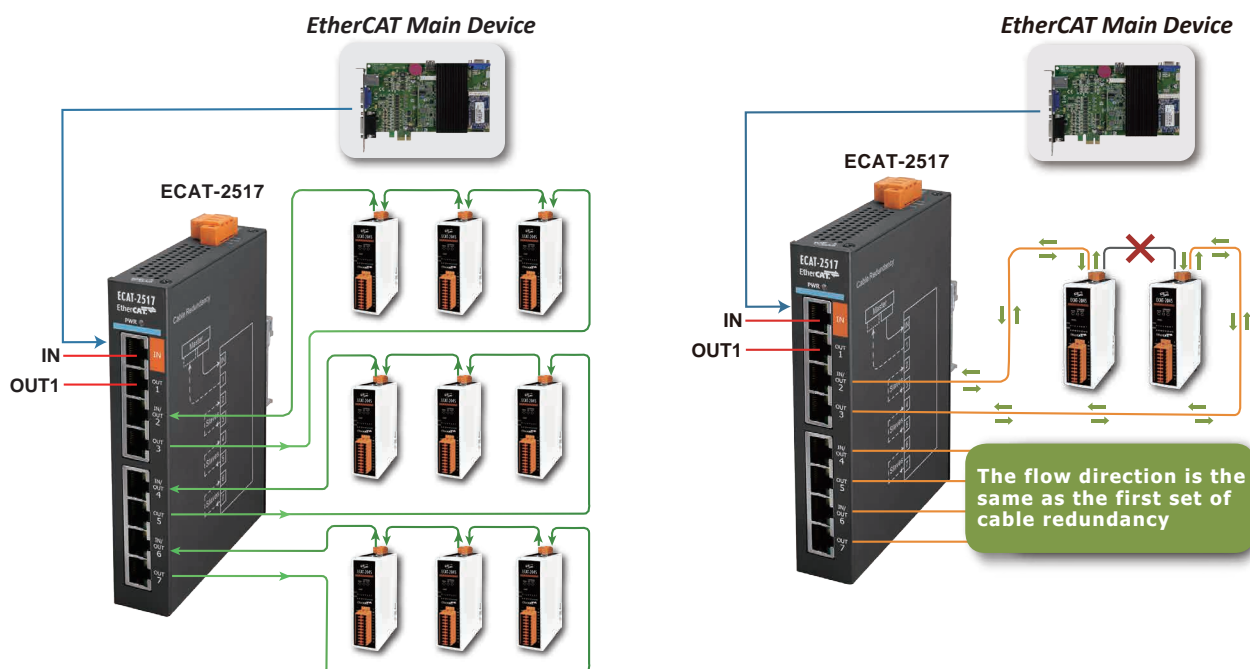
Cable Redundancy

Cable redundancy is a ring topology. When the communication cable on one side is disconnected, it can also communicate through the cable on the other side to ensure the stable operation of the control system. The structure is as follows.



Precautions for Configuring Cable Redundancy

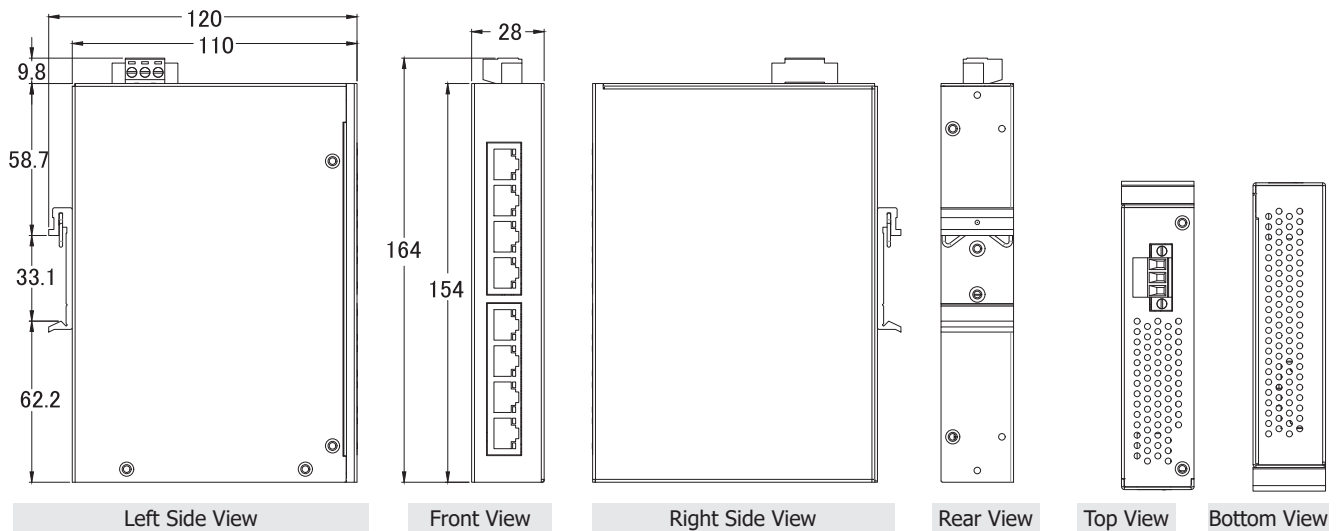
1. Regardless of whether a single or multiple ECAT-251x modules are used in the system, the cable redundancy mechanism only supports a single link disconnection. In the event of multiple cable failures, redundancy protection is not covered, and depending on the failure location, it may be necessary to restart and rescan the entire EtherCAT system.
2. Even though the ECAT-251x features cable redundancy, its proper operation still depends on whether the Main Device supports the EtherCAT Cable Redundancy mechanism.



Specifications

Model	ECAT-2517
EtherCAT	
Ports	8 x RJ-45 (1 IN; 7-OUT)
No. of nodes	6
Distance between Stations	Max. 100 m (100BASE-TX)
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 VDC
Consumption	0.23 A @ 24 VDC
Mechanical	
Casing	Metal
Dimensions (mm)	28 x 154 x 110 (W x L x H)
Installation	DIN-Rail
Environment	
Operating Temperature	-25 ~ 75 °C
Storage Temperature	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

Dimensions (Units: mm)



Ordering Information

ECAT-2517 CR	8-port EtherCAT Junction SubDevice Module (RoHS)
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