EIP-200S: EtherNet/IP™ Adapter Interface for SIMATIC ET200S

Expand your EtherNet/IP system with a multi-functional, extremely flexible, superior remote I/O

The EIP-200S EtherNet/IP Adapter Interface brings the flexibility of the Siemens SIMATIC ET200S I/O family to automation systems using the EtherNet/IP communications network. Automation systems can take advantage of the highly modular SIMATIC ET200S I/O system, including multiple discrete, analog and counter modules and both direct and reversing motor starters. It provides very simple field repair with hot swapping, and fixed field wiring.

EIP-200S EtherNet/IP Adapter Interface with SIMATIC ET200S I/O modules

Key system benefits

- Ability to combine I/O and motor starters in a single station
- Hot swap of I/O and motor starters for simple maintenance and repairs while maintaining permanent field wiring
- Significant reduction in the required field wiring needed to install
- High level of modularity
  - Mix and match I/O and starters as needed
  - Segmenting of field power sections
- Machine builders can standardize on SIMATIC ET200S I/O modules for both EtherNet/IP and Profinet based systems eliminating additional spare parts, drawings, etc.
Key system components

Communication
- EtherNet/IP communication according to ODVA specifications
- Communication: 100Mbps, auto-detection, full-duplex, auto-negotiation
- Fast cycle time 2ms
- QuickConnect class B is supported
  (approx. 650ms start-up time for the IM; approx. 1s until IO cycle starts)
- Monitors and reports faults
- Max. address space: 255 byte input and 255 byte output per station
- Electronic module parameterization and diagnostic
- Firmware update via Ethernet

Hardware
- Two-port switch integrated for easily installing line topology (ring structure is not supported); cost efficient mounting, no external switch necessary
- LED diagnoses corresponding to the ODVA standard for EtherNet/IP
- Multiple field power sections in each I/O station
- Extend up to 63 I/O modules with one EIP-200S adapter interface
- Choose between screw, spring loaded, or “Fast-Connect” field wiring terminations
- Higher vibration resistance and mechanical tolerance
- Snap together backplane assembly
- SD card allows changing of the IM without any tools; both IP address and configuration are stored on the SD
- Power connectors for DC24V loop through
- Connection of EtherNet/IP cable via RJ45 standard connectors. Adapter supports both auto configuration and custom user station configuration

Features and Benefits at-a-glance

EIP-200S EtherNet/IP Adapter Interface with SIMATIC ET200S I/O modules

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td><strong>Structure</strong></td>
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<tr>
<td>Finely-graduated modular design</td>
<td>• Function-oriented, cost-optimized station design</td>
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<td>• 1/2/4/8 channel electronic modules</td>
<td>• Considerable reduction in outlay for configuration and documentation</td>
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<td>• Power modules</td>
<td>• Space savings due to arbitrary arrangement of the modules</td>
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<td>• Integrated motor starters</td>
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<td>Communication capacity, system-integrated motor starter: Direct and reversing starter to 7.5 kW</td>
<td>PLC inputs and outputs, terminal blocks, circuit breakers and contactors in a plug-in module save space and effort involved in wiring</td>
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<td>Permanent wiring due to the separation of mechanical and electronic components</td>
<td>• Pre-wiring possible</td>
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<td>• Module replacement during operation of the EIP-200S (“hot swapping”)</td>
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<td>Individual connection of power modules to common potential</td>
<td>• Individual formation of potential groups (identifiable by the white terminal modules with the power modules)</td>
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<td>• Simple load interruption</td>
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<td>Robust structure for rough industrial conditions (5g constant vibration resistance)</td>
<td>High operating reliability when mounted directly on the machine, high availability</td>
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| Connecting System | |
| Integrated voltage buses | Reduced effort required for wiring |
| Power bus up to 50 A for motor starters | Minimization of wiring in 400 V range |
| Screw-type terminals, spring terminals, and Fast Connect | A change in terminal connection method is not necessary |
| • 2- and 3-wire connection, or | Optimal selection on grounds of space and cost |
| • 2-, 3-, and 4-wire connection | |
The SIMATIC ET200S is well proven and accepted in industries like automotive, mining, and packaging because of its high operating reliability, robust structure for rough industrial environments, mechanical strength, vibration resistance, hot swappable with permanent wiring, and more.

### Ordering Information
Order number is ZNX-EIP-200S. Place order through the Siemens distribution channel. Don’t forget to also order your desired SIMATIC ET200S I/O modules via the SIMATIC Selection Tool.

**ZNX-EIP-200S package includes the following:**
- EIP-200S EtherNet/IP Adapter Interface module with power connector and terminating end unit
- SD memory card
- CD has the following contents
  - ZNX-EIP-200S Configuration Tool
  - Configuration Tool User Manual
  - EIP-200S Manual

### Did You Know?
Siemens designs and manufactures the EIP200S EtherNet/IP Adapter Interface to ensure the quality and compatibility with the SIMATIC ET200S I/O Modules, including the motor starters.

*The EIP-200S with SIMATIC ET200S I/O is the ONLY remote I/O solution where a user can standardize both on PROFINET and EtherNet/IP while maintaining permanent field wiring with motor starters.*

### Addition information:
Siemens offers other EtherNet/IP connectivity products in operator interface, drives, network components, RFID, and more! Please refer to usa.siemens.com/eip for more information or contact your Siemens sales representative.
usa.siemens.com/eip
adsupport@siemens.com
Breakout Design of an EIP-200S with SIMATIC ET200S I/O

PM-E power module
Electronic modules
PM-D power module
Motor starters
Bus terminating module

EtherNet/ IP adapter interface (EIP-200S)
Terminal modules
Motor Starter terminal module with integral power bus

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