

# GENERAL SPECIFICATIONS

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# APPENDIX A

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# General Specifications

## Specifications

| <b>H2-ERM / H2-ERM100 and H4-ERM / H4-ERM100 General Specifications</b> |  |
|---|--|
| <b>Module Type</b>  | Ethernet I/O Communications Master Module  |
| <b>Quantity of Modules</b>  | Defined by CPU, base configuration and power Per Basebudget  |
| <b>Quantity of Slaves per ERM</b>                                       | 16 max.  |
| <b>Diagnostics</b>  | LEDs, ERM Workbench, NetEdit   |
| <b>Communications</b>   | H2-ERM / H4-ERM: 10BaseT Ethernet<br>H2-ERM100 / H4-ERM100: 10/100BaseT Ethernet   |
| <b>Data Transfer</b>  | H2-ERM / H4-ERM: 10 Million bits per second<br>H2-ERM100 / H4-ERM100: 100 Million bits per second                                  |
| <b>Extension Port</b>   | RJ45   |
| <b>Link Good Indicator (LINKGD)</b>                                     | Green LED  |
| <b>Activity Indicator (ACT)</b>   | Red LED  |
| <b>Error Indicator (ERROR)</b>  | Red LED  |
| <b>Power Consumption</b>  | H2-ERM / H4-ERM: 320mA @ 5VDC (Supplied by DL205/DL405 base)<br>H2-ERM100 / H4-ERM100: 300mA @ 5VDC (Supplied by DL205/DL405 base) |
| <b>Operating Temperature</b>  | 32° to 140° F (0° to 60° C)  |
| <b>Storage Temperature</b>  | -4° to 158° F (-20° to 70° C)  |
| <b>Relative Humidity</b>  | 30% – 95% RH (non-condensing)  |
| <b>Environmental Air</b>  | No corrosive gases permitted   |
| <b>Networking Protocols Supported</b>                                   | UDP/IP, IPX  |
| <b>Manufacturer</b>   | Host Automation Products   |
| <b>Link Distance</b>  | 100 meters (328 feet)  |

| <b>H2-ERM-F / H4-ERM-F General Specifications</b> |  |
|---|--|
| <b>Module Type</b>                                | Ethernet I/O Communications Master Module                    |
| <b>Quantity of Modules</b>                        | Per Base Defined by CPU, base configuration and power budget |
| <b>Quantity of Slaves per ERM</b>                 | 16 max.  |
| <b>Diagnostics</b>                                | LEDs, ERM Workbench , NetEdit                                |
| <b>Communications</b>                             | 10BaseFL Ethernet (fiber optic)                              |
| <b>Data Transfer</b>                              | 10 Million bits per second                                   |
| <b>Extension Port</b>                             | ST-style fiber optic connector                               |
| <b>Link Good Indicator (LINKGD)</b>               | Green LED  |
| <b>Activity Indicator (ACT)</b>                   | Red LED  |
| <b>Error Indicator (ERROR)</b>                    | Red LED  |
| <b>Power Consumption</b>                          | 450mA @ 5VDC (Supplied by DL205/DL405 base)                  |
| <b>Operating Temperature</b>                      | 32° to 140° F (0° to 60° C)                                  |
| <b>Storage Temperature</b>                        | -4° to 158° F (-20° to 70° C)                                |
| <b>Relative Humidity</b>                          | 30% – 95% RH (non-condensing)                                |
| <b>Environmental Air</b>                          | No corrosive gases permitted                                 |
| <b>Networking Protocols Supported</b>             | UDP/IP, IPX  |
| <b>Manufacturer</b>                               | Host Automation Products                                     |
| <b>Link Distance</b>                              | Up to 2,000 meters (2km), 6,560ft (1.2 miles)                |

### Ethernet Standards

Various institutes and committees have been involved in establishing Ethernet data communication standards. These specification standards assure Ethernet network compatibility for products from a broad variety of manufacturers.

The ERM module complies with American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers standard ANSI/IEEE 802.3, Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Methods and Physical Layer Specifications. This standard has been adopted by the International Organization for Standardization (ISO) as document ISO/IEC 8802-3.

The Electronic Industries Association (EIA) and Telecommunications Industries Commercial Building Telecommunications Wiring Standard designated EIA/TIA-568A defines implementation of 10BaseT (twisted pair) and 10BaseF (fiber optics) for Ethernet communications.

The same two organizations produced EIA/TIA TSB40-Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware. The purpose of this document is to specify transmission performance requirements and connecting hardware requirements.