General Specifications

In This Appendix...

General Specifications

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Specifications

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

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

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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.