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)

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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)

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.