

New Product Bulletin

NP 1014HE

Hirschmann™ Embedded Ethernet

The Hirschmann™ Embedded Ethernet Module (EMM) brings network connectivity right into the field device. This allows the manufacturers to focus on their essential business and provides a networking capability that speeds the time to market of their devices.



The Hirschmann™
Embedded Ethernet
Module (EEM) combines
Advanced Networking
expertise with
State-of-the-Art
Industrial Ethernet
Technology and
Innovative Automation
Hardware.

Dedicated Use of Synergies

Embedded Ethernet offers manufacturers of intelligent automation devices a ready solution to the Ethernet needs of their products. This allows them to focus on their essential business.

With the Hirschmann™ Embedded Ethernet Module (EEM), Belden brings network connectivity right into the devices. At the same time, facilitates their integration into a network management system, adding further value to a wide range of field devices, including:

- Intelligent sensors
- Measuring instruments
- I/O modules
- Distribution boxes
- Displays
- Valve clusters
- Motor starters

An Evaluation Kit – made in Germany – and qualified on-site support pave the road to efficient integration.

Competence on a Chip

The EEM provides two Fast Ethernet ports for connecting to both linear as well as ring-type networks. A universal micro-controller interface links the module to the logic of the automation device. The data exchange between these interfaces relies on a programmable function block.

Free programmability is the outstanding characteristic of the EEM, ensuring the required flexibility and sustainability in innovative environments.

The EEM is suitable for use with all Ethernet automation protocols, such as:

- Profinet RT (IO devices)
- EtherNet/IP (adapter devices)
- EtherCAT (slave controllers)
- Sercos III (slave devices)



Embedded Ethernet - the Fast Way to Network Connectivity

Integration board with switch functionality

Evaluation Kit for connection to a field device

Stand-alone Kit with processor extension

Embedded Ethernet Module (EEM)

Central element of the EEM is a programmable gate array, lending the module a high degree of adaptability to the needs of the specific field device. The particular network settings are made by means of standard SNMP exclusively through the two front Ethernet ports.

Ports

2x RJ45 for 10/100 MB 1x 50-pin μC connector

Performance Features

Altera Cyclone III FPGA 8 MB RAM 2 MB Flash

Operating Specifications

Supply: 3.3V/3W
Temperature Range: -40 to +85 °C
Dimensions (mm): 72x56x16

Evaluation Kit

The operating board for the EEM provides the supply voltage and wide pin headers for easy access to all signals of the μC interface. Eight push buttons permit convenient simulation of input signals. LEDs indicate the status of all output signals.

Stand-alone Extension

Evaluation Kit

For complex demands, the functions of the intelligent field device can be simulated using a CPU board from Phytec company. A serial interface is available for programming the CPU conveniently by means of a PC. This extended configuration turns the Evaluation Kit into a powerful while at the same time self-sufficient and compact unit.

Embedded Ethernet Module

μC Interface RAM 3ottom) Phytec CPU Adapter Board Serial Interface Cyclone FPGA Ethernet Ports LED Array Power Supply Connector Push Buttons μC Interface on Available as of 2010-Q2. Embedded Contact our support specialists now! Operating Board