FOUNDATION Fieldbus Linking Devices

1788-EN2FFR – EtherNet/IP to FOUNDATION Fieldbus
1788-CN2FFR – ControlNet to FOUNDATION Fieldbus

Features & Benefits

- Redundancy options:
  - Redundant linking devices
  - Redundant H1 media
  - Redundant ControlNet media
  - Ethernet/IP Device Level Ring
  - Redundant Controllers
- Fully integrated solution through the PlantPAx™ process automation system
- No external configuration software
- Intuitive graphical through AOPs
- Convenient web interface
- Add devices while online
- Auto device discovery and configuration
- Supports 16 devices on a single segment
- 8 Input & 8 Output PVs per field device
- Built-in power conditioners and protection provided on two H1 ports supply 500mA each
- DTM available for asset management

Combine the Power of PlantPAx with FOUNDATION Fieldbus Technology

The Rockwell Automation PlantPAx™ process automation system provides a single plant-wide control and information platform while the FOUNDATION Fieldbus standard provides the ability to distribute the control architecture throughout your facility. Combine these two powerful technologies to enable integrated, seamless distribution of data and the execution of process control with devices from multiple sources.

The 1788-EN2FFR and the 1788-CN2FFR provide a fully integrated and easy to use solution for adding FOUNDATION Fieldbus to any ControlLogix™ platform. The modules provide a direct link from EtherNet/IP or ControlNet, to the FOUNDATION Fieldbus H1 device level network.
Product Overview

Integration into RSLogix5000™ is made seamless by the module’s Add-On-Profile (AOP) which provides an intuitive graphical environment for the configuration of the field device network and all field devices. The AOP captures all Process Variables (PVs) in Engineering Units and provides PV status data and extended device diagnostics. Devices can also be quickly configured using the auto configure tool.

Field Device Tool / Device Type Manager (FDT / DTM) technology is supported, which allows direct access to device configuration and diagnostics via FDT frames such as FactoryTalk™ AssetCentre. In addition, the Rockwell FDT Thin Frame (read only) can be launched from a Human Machine Interface (HMI) or RSLogix5000 (via AOP), providing operators and technicians a graphical view of each field device's status and extended diagnostics.

To assist with troubleshooting, a 128 x 128 pixel display provides access to linking device status including network voltages and currents, internal temperature, as well as communication quality to each device, and the status of each device. A built-in webserver also provides remote access to network and field device data.

The 1788-EN2FFR and 1788-CN2FFR support as many as 16 field devices on a single H1 segment. The linking devices have full FOUNDATION Fieldbus Host capability including Link Active Scheduler (LAS) capability. A predefined data structure for each field device provides eight input Process Variables (PVs), eight output PVs, and eight PVs for inter device communication for full distributed control.

Built-in power conditioners and protection are provided, helping to minimize installation space requirements. The H1 segment is divided between two physical ports with individual protection and a supply of 500mA per port. These panel or DIN rail mountable devices also support built-in configurable line termination.

Multiple levels of device and media redundancy are supported including: ring, split, and redundant trunk. Likewise, take advantage of redundant EtherNet/IP DLR and ControlNet media, and duplicate linking device options for H1 interface redundancy. Redundant H1 topologies are achieved with the use of 1788-FBJB4R fieldbus junction boxes.

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