

About the Linking Device

The 1788-EN2DN Ethernet-to-DeviceNet linking device lets you seamlessly connect your information- or control-level networks with your device-level network.

The linking device provides full DeviceNet master functionality, so you can connect up to 63 DeviceNet slave devices to an Ethernet TCP/IP interface that supports the EtherNet/IP network and an HTTP web server. As examples, you could use the linking device:

- as a gateway to connect information- or control-level networks to device-level networks for programming, configuration, control, or data collection.
- as a router/bridge to connect the EtherNet/IP network to the DeviceNet network.

The linking device provides centralized data storage, or I/O tables, for data shared between the DeviceNet and EtherNet/IP networks. Data is placed into the I/O tables by one network interface, allowing the data to be read through the other network interface.

The linking device appears as a single device on either network by using standard protocol mechanisms. No special, or extended, protocol features are required for the devices on either network to read or write the data flowing through the I/O tables; all cross-network activity is transparent to the devices on either network.

All connections, whether power or fieldbus, to the linking device are made on one end of the module. Phoenix connectors are provided for power and DeviceNet connections. A RJ45 style connector is provided for EtherNet/IP connection.

The linking device can be mounted to a DIN rail.

System Requirements

The following hardware and software components are required to use the linking device.

Required Hardware

- 1788-EN2DN linking device
- DeviceNet cabling, power, and devices forming a DeviceNet network
- Ethernet cabling and power
- Computer with access to the Ethernet network
- Computer running DeviceNet configuration software

The DeviceNet slave devices with which the linking device communicates are specified using a DeviceNet Configuration Software tool such as RSNetWorx for DeviceNet software.

- 24V DC power to the linking device

DeviceNet power may be used; however, using DeviceNet power bypasses the DeviceNet network isolation.

Required Software

- DeviceNet configuration software, such as RSNetWorx for DeviceNet software, version 4.01 or later, to configure DeviceNet devices and the linking device's DeviceNet functionality
- RSLinx[®] software, version 2.31 or later
- DHCP server 2.3.2 or later, which ships with RSLinx software version 2.42 and later. If you are using an earlier version of RSLinx software, you will need to download the standalone server from <http://www.rockwellautomation.com/support>