



Compact™ I/O 1769-ADN DeviceNet Adapter

Use this document along with the Compact Adapter for DeviceNet User Manual, publication 1769-UM001A-US-P.

Limits to Pass Through

The 1769-ADN DeviceNet adapter supports a maximum system size of 30 I/O modules. However, there are limits to the 1769 I/O system size which can be configured using RSNetWorx™ for DeviceNet™ software via a Pass Through system.

Pass Through is the feature, of a 'bridge' or 'linking device', which receives messages on one network and send those messages on to the second network. When using a Pass Through system to configure a 1769-ADN adapter, you need RSNetWorx for DeviceNet on a higher level network (e.g. ControlNet™, Ethernet™, etc.) and the 1769-ADN physically connected on a DeviceNet network.

The limit is a result of an insufficient message-buffer memory size in the bridge or linking device, therefore making it bridge dependent. To determine if your 1769-ADN system is Pass Through limited, count the number of 1769 components (modules, power supplies, cables, etc.) including the 1769-ADN).

For example, a system with Bank 1 consisting of a 1769-ADN, three I/O modules, a power supply, and a CRL cable and Bank 2 consisting of two I/O modules, a power supply, and an end cap/terminator would have ten components.

These devices have a Pass Through limit of 22 components:

- 1756-DNB
- 1788-CN2DN
- 1784-PCIDS
- 1771-SDN

The 1747-SDN has a Pass Through limit of 16 components and the M0 and M1 file size must be set to 361.

Note

These limits only exist when using Pass Through to configure a 1769-ADN. When RSNetWorx for DeviceNet and the 1769-ADN adapter are on the same DeviceNet network, no configuration limit exists.

Limits to Auto Device Replace (ADR)

The 1769-ADN DeviceNet adapter supports a maximum system size of 30 I/O modules. However, there are limits to the 1769 I/O system size supported by the Auto Device Replace (ADR) function of the scanner, bridge, or linking device.

The limit is inherent to the scanner, bridge, or linking device. To determine if your 1769-ADN system is ADR limited, count the number of 1769 components (modules, power supplies, cable, etc.) including the 1769-ADN.

These devices have an ADR limit of 12 components:

- 1756-DNB
- 1747-SDN
- 1788-CN2DN
- 1784-PCID

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