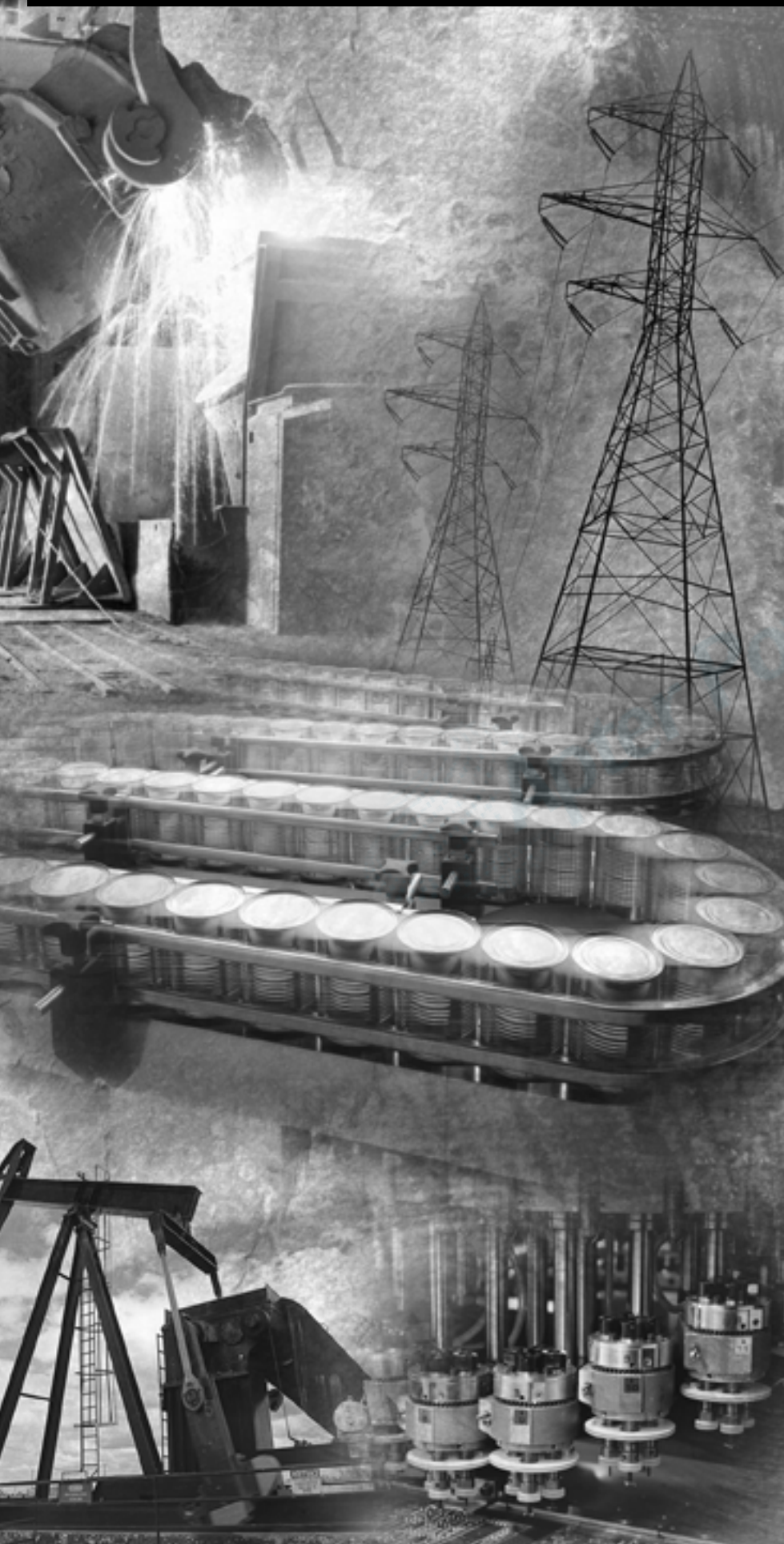




Allen-Bradley

DeviceNet Interface

Catalog Number 1761-NET-DNI

User Manual

**Rockwell
Automation**

Safety Considerations

This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D, or non-hazardous locations only.

ATTENTION



Explosion Hazard

Substitution of components may impair suitability for Class I, Division 2.

Do not replace components unless power has been switched off and the area is known to be non-hazardous.

Do not disconnect connectors unless power has been switched off and the area is known to be non-hazardous.

Use only the following communication cables and replacement connectors in Class I, Division 2, Hazardous Locations.

Environment Classification	Communication Cables
Class I, Division 2 Hazardous Environment	1761-CBL-PM02 Series C (or later)
	1761-CBL-HM02 Series C (or later)
	1761-CBL-AM00 Series C (or later)
	1761-CBL-AP00 Series C (or later)
	1761-RPL-00 DeviceNet Connector

Mounting

The DNI can be mounted in the vertical or horizontal position. There are no spacing requirements except as necessary for DIN rail latch movement.

See Physical Specifications on page 85 for operating temperature specifications.

DIN Rail Mounting

Follow these steps to mount the DNI on a DIN rail.

1. Mount your DIN rail.
2. Snap the DIN rail latch into the closed position.
3. Hook the top slot over the DIN rail.
4. While pressing the unit against the rail, snap the unit into position.

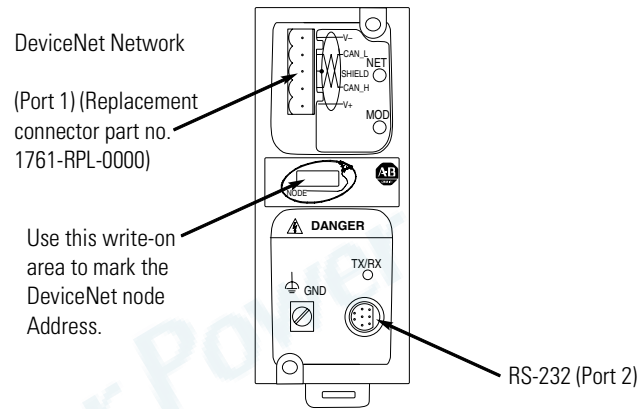
Network Port Wiring

DeviceNet Network

To properly design your DeviceNet network, see DeviceNet Media Design Installation Guide, publication DNET-UM072. This document provides design guidelines concerning wiring practices, connectors, grounding and power budgeting.

This publication is available from your Allen-Bradley distributor, or from the Internet at www.literature.rockwell.com.

Port Identification



Cable Selection Guide

Port 2 of the DNI is an 8-pin mini-DIN RS-232 port that provides connection to DF1 compatible RS-232 devices. The table below describes the RS-232 compatible cables.

RS-232 Devices

DNI Connected to:	Catalog Number	Use Cable
MicroLogix (all series)	1761-CBL-AM00 1761-CBL-HM02	Mini DIN to Mini DIN 45cm (17.7 in) 2m (6.5 ft.)
SLC 5/03, SLC 5/04, or SLC 5/05 Channel 0	1761-CBL-AP00 1761-CBL-PM02	Mini DIN to D-Shell 45cm (17.7 in) 2m (6.5 ft.)
PLC 5	1761-CBL-AP00 1761-CBL-PM02	Mini DIN to D-Shell 45cm (17.7 in) 2m (6.5 ft.)

Setup, Programming, and Troubleshooting

DNI Software Files

To configure the DNI as an I/O slave device on a DeviceNet network, you may need to obtain two software files. These two files provide your network configuration software with the information it needs to interface with the DNI.

DNI Series A Information

RSNetWorx and DeviceNet Manager (version 3.0 and higher) include the files necessary for DNI Series A.

DNI Series B Information

To configure the Series B DNI, you must have the Series B DNI EDS file installed in your DeviceNet configuration software. RSNetWorx DeviceNet Network Management software version 2.11.36 or higher includes all Series B DNI files. You can also download the new files from <http://www.ab.com/micrologix>.

The following table shows the old and new file filenames:

Series B DNI Files

1761-NET-DNI	File Description	File Name
Series B	DNI Electronic Data Sheet	1761DNI3.EDS
	DNI Configuration Software Utility	DNIUTIL1.EXE (Rev. 2.0 or higher)
	DNI Icon for Configuration Software	1761DNI.ICO or 1761DNIB.BMP
Series A	DNI Electronic Data Sheet	1761DNI2.EDS
	DNI Configuration Software Utility	DNIUTIL1.EXE
	DNI Icon for Configuration Software	1761DNI.BMP

ATTENTION



DNI Series A configurations are not compatible with DNI Series B. You must manually re-enter the Series A parameters into the Series B DNI. This step is required because of the enhanced functionality of DNI Series B.

Specifications

Physical Specifications

Description	Specification
24V dc Power Source Required	11...25V dc
Current Draw	200 mA at 24V dc 350 mA at 11V dc (400 mA maximum inrush for 30 ms at 24V dc)
Internal Isolation	500V dc
Ambient Operating Temp.	0° C...+60° C (+32° F...+140° F)
Storage Temperature	-40° C...+85° C (-40° F...+175° F)
Agency Certification	UL 1604 C-UL C22.2 No. 213 Class I Division 2 Groups A,B,C,D CE compliant for all applicable directives ODVA Conformance Version 2.0

DeviceNet Specifications

Feature	Y/N	Comments
Peer to Peer Messaging	Y	Only to other Controllers/DNI's
I/O Assembly Explicit Messaging	Y	Output sets only when I/O connection set is unowned
I/O Peer to Peer Messaging (also known as Dynamic I/O)	N	
UCMM	Y	
Configuration Consistency Value	Y	
Deferred Delete	Y	
Faulted Node Recovery	Y	
DeviceNet Auto-Baud	Y	
Flash Upgradeable	N	
Baud Rate	All	125K, 250K, 500K
Master/Scanner	N	
I/O Slave:	Y	
Bit Strobe	N	
Polling	Y	
COS (change of state)	Y	
Flat cable		TBD

Dimensions

