



Woodhead's SST™ DeviceNet Software Tools provide the support required for your DeviceNet applications.

## SST™ Software Tools For DeviceNet

### Features

#### Configuration Console

- Configure DeviceNet parameters
- Add devices automatically through network detection or manually from the device library

#### Network Analyzer

- Captures all valid messages
- Display and filter captured messages including timestamp, MAC ID, message group, message ID, data values and a description of message type
- Save captured messages to file
- Capture up to 100 million messages over a 46 day period
- Allows the diagnosing of messages to aid in the identifying of scanner and slave related problems

#### Diagnostic and Test Tools

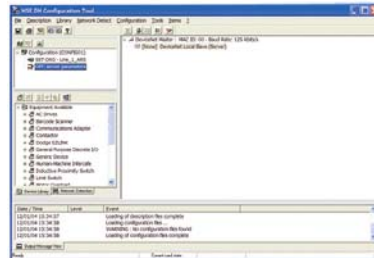
- Queries and reads current configuration without disturbing the network
- Displays information on DeviceNet network, card status, host interface memory block, device configuration, I/O data

### Operating Systems Supported

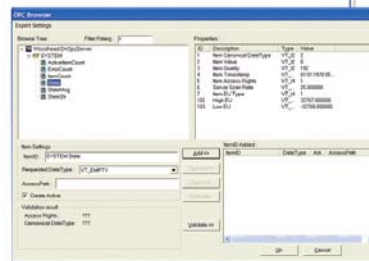
- Microsoft Windows NT4 / 2000 / XP



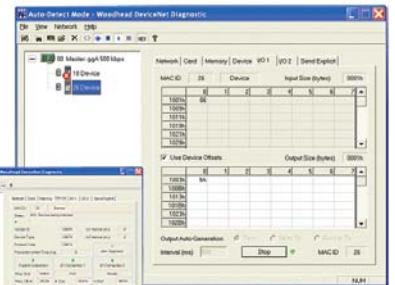
Member of the  
Open DeviceNet Vendor Association



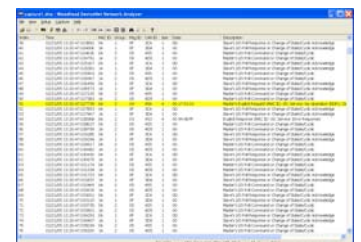
Configuration Console



OPC Browser



Diagnostic and Test Tools



Network Analyzer

### Configuration Console

The following list sets out the main FUNCTIONS of the user configuration process.

1. Declaring the cards.
2. Configuring the DeviceNet parameters (Master Scanner MAC ID, Baud Rate, Scan Interval, and Reconnect Interval).
3. Adding devices, either by automatically detecting the devices on the network if the card is in the PC, or manually from the device library.
4. Setting up the devices in the configuration (Equipment ID, Active state, and connection parameters).
5. Declaring (and if necessary configuring) the data access items for the OPC server.
6. Saving the configuration

Once these steps have been performed, the card can be used by the diagnostic tool, by an OPC client or by a user application.

The Console also includes the following additional functions:

- Configuration manager. The configuration manager is used to define and use several configurations successively.
- Transferring the configuration onto a remote workstation. This function is required where the configuration console is installed on a different machine than the user application (e.g. the OPC server)
- Monitoring device status. This function is enabled when the configuration list (scan list) is placed online (online-config mode).



The **Network Analyser** is used with a SST DeviceNet interface card to capture network activity. It can perform the following functions:

- Captures the individual CAN messages on a CAN or DeviceNet network, using the 11-bit identifier as defined in the CAN specification version 2.0 part A.
- Allows for the definition of a trigger filter to specify exactly when the capture should begin, based on specific messages, communications between a client and server, or mask/match criteria.
- Provides options to define the number of messages to capture prior to, and the number of messages or time to capture following the trigger point.
- Allows for the definition of a capture filter or mask/match criteria to specify exactly what should be captured, based on specific messages between a client and server.
- Provides the ability to display and analyse the captured messages.
- Displays the timestamp, MAC ID, message group, message ID, data values, and a description of the message type associated with a DeviceNet message.
- Allows for post-filtering of the captured messages, based on specific messages, communications between a client and server, or mask/match criteria.
- Allows for searching of a specific message in the list of captured messages.
- Saves the captured messages to a capture file, or a comma delimited or fixed column width text file.
- Can capture up to 100 million messages over a period of up to 46 days.

The **Diagnostic Tool** is used with one or more SST DeviceNet interface cards to provide scanner diagnostic information and aid in the diagnosis of scanner related problems. It can perform the following functions:

- Automatically detects the devices and allows the user to go online with the detected list.
- Capable of running at the same time as other DN scanner applications that have control of the DN cards. The Diagnostic tool queries the DN cards in the computer and reads the current configuration for each of them without disturbing the other application(s).
- Loads the current network configuration generated by the Console, or an exported Console XML configuration file, and uses it to configure the DN cards in the computer.
- Displays information regarding the DN network, including the status of the scanner, server, CAN counters, and bus.
- Displays information regarding the status of the DN card, scanner module, and application kernel.
- Displays the host interface memory block for a DN card.
- Displays the configuration information for the master, server, and devices on a DN network.
- Displays and allows changes to the I/O data for the server and devices on a DN network.
- Allows sending explicit messages to devices on a DN network.

### Ordering Information

Part Number	Product Description	Other Related Products
<b>SST-DN3-DIA<sup>†</sup></b>	DeviceNet Diagnostic Tool	IP67 and IP20 DeviceNet Switches Gateway Solutions Cable Assemblies Diagnostic Tools Network Interfaces
<b>SST-DN3-CNF-U</b>	DeviceNet Software Console with USB Key (includes Network Analyzer)	
<b>SST-DN3-CNF-P</b>	DeviceNet Software Console with Parallel Port Key (includes Network Analyzer)	
<b>SST-DN3-OPC</b>	OPC Data Server Software (must purchase at least one SST- DN3-CNF)	
<b>The SST Software Tools for DeviceNet require one of the following interface cards:</b>		
<b>SST-DN3-PCU-1</b>	DeviceNet card, Universal PCI bus (3.3V / 5V), 1 channel	
<b>SST-DN3-PCU-2</b>	DeviceNet card, Universal PCI bus (3.3V / 5V), 2 channel	
<b>SST-DN3-104-1</b>	DeviceNet card, PC/104, 1 channel	
<b>SST-DN3-104-2</b>	DeviceNet card, PC/104, 2 channels	
<b>SST-DN3-VME-1</b>	DeviceNet card, VME, 1 channel	
<b>SST-DN3-VME-2</b>	DeviceNet card, VME, 2 channels	
<b>SST-DN3-VME-4</b>	DeviceNet card, VME, 4 channels	

<sup>†</sup> Included with SST-DN3 NICs interface cards