

National Instruments Data Sockets – Labview

The NIDataSockets communication driver implements communication with the National Instruments software. This includes LabView and any others that are compatible with the National Instruments Data Sockets interface.

Summary Information

Communication Driver Name: NIDataSockets

Implementation DLL: T.ProtocolDriver. NIDataSockets.dll

Protocol: National Instruments Data Sockets

Interface: TCP/IP

PLC types supported: National Instruments Labview

Multi-threading: User defined

Max number of nodes: User defined

PC Hardware requirements: Standard PC Ethernet interface board

Supported Operands: Any tag defined on the target system

Channel Configuration

Protocol Options

Maximum size of blocks: Defines the maximum number of addresses in a read block

Message Format: Defines the protocol used for the Data Sockets communication

Options: DSTP, OPC, LOOKOUT, HTTP, and FTP

Settings

TCP/IP:

NodeConnections: Defines the maximum number of parallel requests that will be sent to each node (asynchronous communication)

Node Configuration

Station Configuration

TCP/IP:

- Station syntax: <IP address>
- Where:
 - **<IP address>** = The IP address of the slave device in the network
 - You can also add /<Branch> to the Station name

Ex: 192.168.1.1

Ex.: 122:168.1.1/MyTags

Point Configuration

Address

The syntax for the communication point is: InitialBranch/TagList/Tag1



Note Item

If you have a lot of tags sharing the initial branch, you can remove the InitialBranch from the Point address and move it to the Node-Station address.

Troubleshoot

The status of the driver's execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information

The above tools indicate if the operations have succeeded or have failed. A status of 0 (zero) means communication is successful. Negative values indicate internal driver errors, and positive values indicate protocol error codes.