



## NSX-100 LONWORKS<sup>®</sup> NETSERVER

The NSX-100 NETSERVER provides seamless, reliable and secure connectivity of LONWORKS<sup>®</sup> control networks to any corporate IP (Internet Protocol) data network or the Internet. This host controller enables control, monitoring and management of up to 128 LONWORKS nodes.

The applications supported in the NSX-100 NETSERVER enable it to function as an area controller for a system or building enabling a variety of traditionally discrete controllers to be replaced by a single multi-functional controller. In addition to the Web serving capabilities and graphical design tools, the NSX-100 NETSERVER also incorporates Alarm Handling, Data Logging, Scheduling and Optimum Start Stop services.

### Web Serving

At the core of the NSX-100 NETSERVER is the ALTITUDE Server, a Java based Web-serving application with a host of modular data services and applications. Standard html pages can be served directly to your Web browser, without the need for a dedicated graphical user interface. Multiple Client applications can then take control or monitor any part of the control network, subject to valid user authentication. This enables remote monitoring, diagnostics and support through the Internet or corporate data network. A diagnostic tool is pre-loaded which allows complete remote control over the IP network; this includes back-ups, upgrades, diagnostics and remote application development.

### Rapid Application Engineering

Engineering tools have been built into the NSX-100 NETSERVER to minimise engineering time of applications. Automatic learning of all nodes and associated network variables from the LNS database is incorporated, which logically display themselves in the project explorer. From here, nodes can be linked to graphical representations of the physical application and animations developed to suit. Intelligent 'Smart Components' can be created to generate generic graphical displays from a single network variable to a whole node. Simply drag a LONWORKS network variable or node from the project explorer on to a graphic page and all the associated control points will

configure themselves on the graphical view, automatically.

### Simple Management Tool with Scalability

The NSX-100 NETSERVER is able to provide real-time control and monitoring from a single network variable running in a Java Applet on multiple desktops, e.g. set-point control, right through to control of a complete system. Complex applications can be dramatically simplified through logical navigation and graphical representation of systems.

From a single building, controlling a single application, right through to a complex system running multiple clients and a variety of applications with multiple vendors products, the NSX-100 NETSERVER provides a simple, yet technically advanced web interface.

The NSX-100 NETSERVER also benefits from the scalable LNS architecture that allows a single remote LNS database on the IP network to manage multiple NSX-100 NETSERVER's. Alternatively a single LNS database can be hosted within the NSX-100 NETSERVER.

### Web Configurable Applications

Configuration and presentation of the following applications are available through the browser/client:

**Alarm Handling** Full alarm handling of LONWORKS variables can be provided from the network or via logic configured in the controller. Alarm data can be stored in the controller or on a remote server in an SQL, Oracle or Access database. E-mails can also be generated based on alarm events.

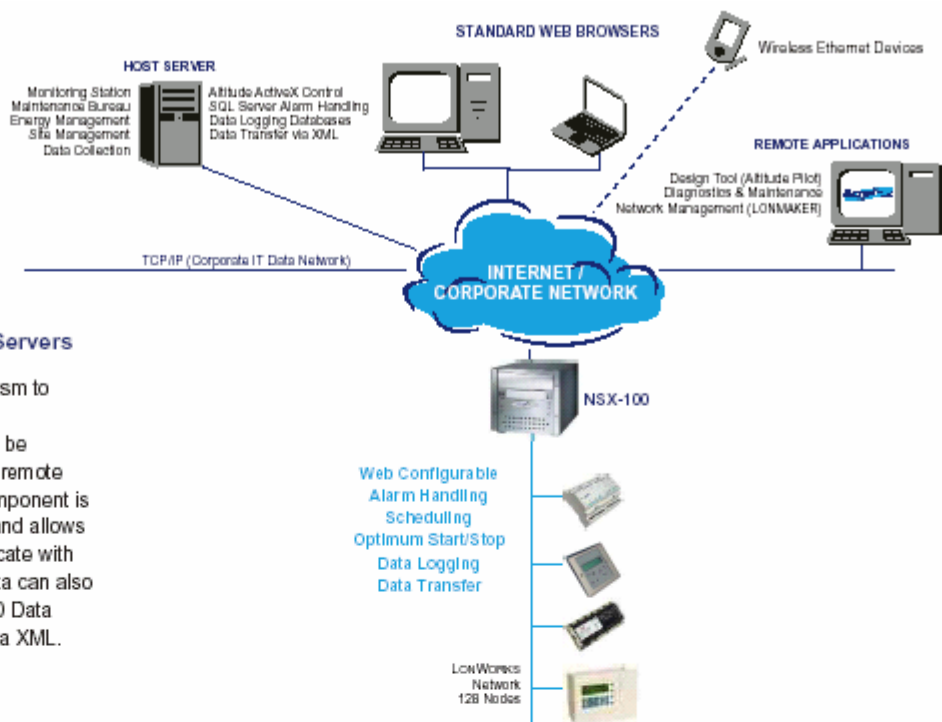
**Data Logging** Presentation of the logged data is available through configurable web pages. The data is logged on interval or event and can be stored locally in the controller or on a remote IP server in a SQL, Oracle or Access database.

**Scheduling** Multiple time schedules programmed through the configurable web pages. Triggers from a schedule can start functions such as logging or set the value of a network variable. Holidays and Specials Days are also graphically configured through the browser.



## Features

- Java enabled Client/Server architecture
- Web Configurable Alarm Handling, Data Logging and Scheduling
- Alarms and Logged data can be stored locally or on remote server (via IP)
- Operates on Local LNS™ Database within the NSX-100 NETSERVER or on a remote LNS™ Database (via IP)
- Viewed through standard browsers such as Internet Explorer™ or NetScape Navigator™
- E-mail support for alarms and events based on exception reporting
- Simultaneous connections from multiple Web browsers
- Smart Components automate generic graphical displays
- Secure Internet access through User Authentication
- Engineering tools to aid rapid development of application
- Real-time automatic update of any network variable (without the need for 'refresh')
- Dial-up Network Services supported
- Projects can be ported up to NSX-1000 / 2000 NETSERVER as the applications grow



### Data transfer to Remote Servers

Altitude-X, provides a mechanism to extract data from an NSX-100 NETSERVER to enable data to be monitored and controlled from remote applications. This software component is based on an Active-X control and allows other applications to communicate with the NSX-100 NETSERVER. Data can also be extracted from the NSX-100 Data Logging or Alarms database via XML.

# Specification



## NSX-100 NETSERVER

Memory	➤	40GB Hard Drive / 256MB Ram
Transceiver Type	➤	TP/FTT-10A
Power Supply	➤	110/230 VAC
Power Connector	➤	IEC
LONWORKS Twisted Pair Connector	➤	Weidmuller 2-Conductor SLA 2/90
Supported Number of LonWorks Nodes	➤	128 (Maximum in the LNS Database)
Standard Internetworking Protocols	➤	SNMP, TCP/IP, DHCP, HTTP, FTP, SMTP
Ethernet Interface	➤	10BaseT / 100BaseT
Ethernet Connector	➤	RJ-45
Serial Ports	➤	1 x RS-232 / 2 x USB
Status Indicators (LED's)	➤	Power, Ethernet Link, Ethernet RX/TX
Clock	➤	Real Time, Battery Backed
Mounting	➤	Desk Mount
Dimensions	➤	270D x 190W x 160H mm
Operating Temperature	➤	0° to +50°C
EMI	➤	CE / FCC / UL

The NSX-100 NETSERVER has been designed for applications with no more the 128 Nodes in the LNS database. Should the requirements exceed this please refer to the NSX-1000/2000 Product Datasheets.