



Description

NetX Ethernet is a gateway module for interconnecting serial industrial buses and devices with RS-232/485 interface to Ethernet/LAN network.

Gateway is a medium and protocol converter as well – it converts between Modbus ASCII/RTU and Modbus/TCP, encapsulating serial messages into TCP packets.

It is configured as passive server, meaning that a client – PLC or SCADA application - opens a TCP connection.

There are two operating modes. In transparent mode gateway only forwards Modbus messages among Ethernet and RS-485 network with protocol conversion. In this mode response time is limited by transfer rate at serial bus.

In proxy mode gateway operates as local master polling RS-485 slaves according to preloaded poll table, and storing acquired fresh data to cache memory. On every client's Modbus/TCP request gateway responds with registers from its cache memory. This mode significantly reduces response time to Ethernet range in milliseconds.

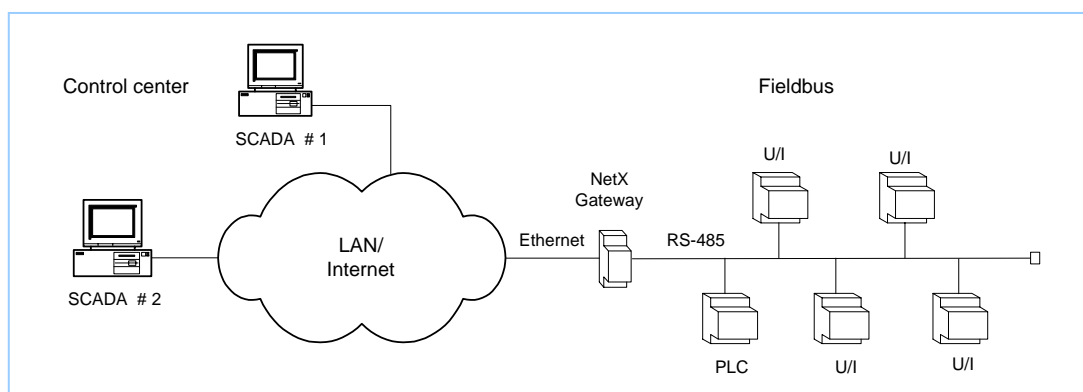
Features

- ▶ Interconnecting RS-232/485 and Ethernet/LAN networks
- ▶ Modbus RTU/ASCII to Modbus/TCP protocol conversion
- ▶ Transparent and Proxy operating mode
- ▶ Windows application for configuration via LAN network
- ▶ Industrial design:
 - extensive operating temp. range
 - DIN rail mounting
 - industrial DC power supply
 - galvanic isolated RS-485 input
 - watchdog timer

Applications

NetX Ethernet is designed for application in industrial communications and process automation, alarm and telemetry systems. It is used for:

- Connecting distributed I/O modules and PLCs to local area network;
- Remote measuring and supervising through HFC cable distributed system;
- Connecting VHF/UHF radio networks to LAN.



Specifications

Serial Communication	
Interface	RS-232/422/485
Rate	1200, 2400, 4800, 9600, 19200 bps
Format	8, N, 1
Protocol	Modbus RTU/ASCII
Connector	DB9 (Male) common for RS-232 and RS-422/485

Ethernet Communication	
Interface	Ethernet, IEEE 802.3
Rate	10 Mbps
Protocol	Modbus/TCP (gateway address 255)
IP parameters	IP address, Subnet mask, Default gateway
No. of TCP connections	1
Connector	RJ45 10TBase

Operating Mode	
Transparent	Transparent Modbus communication
Proxy	Poll table with register field per defined Modbus address
* Read commands	Read Holding Registers, Read Input Registers, Read Coil Status
* Write commands (higher priority)	Preset Single Registers, Preset Multiple Registers, Force Single Coil, Force Multiple Coils
* Poll rate	Always, 1s, 2s, 5s, 10s, 30s, 1min, 5min, 10min, 15min
* Poll table capacity	64 poll commands
* Register field per address	Holding Registers (16), Input Registers (16), Coils (16)

* Proxy mode only.

General	
LED indicators	PWR, TxD, RxD, LAN, LINK, CON
Power supply	10 – 28VDC/4W
Power supply connector	Disjoinable screw clamp
Overvoltage protection	RS-422/485, via optocouplers up to 1500V
Operating temperature	-25 do 70°C
Mounting	DIN rail 35mm

Model	
NetX-Ethernet MB-TCP	NetX Ethernet with RS-232/422/485 connector