



# NetCom 413 PRO

4 ports secure serial device server



## KEY FEATURES

- Controls 4 RS232/422/485 device located virtually anywhere via Ethernet or Internet
- Secure encryption on Ethernet
- LAN interface  
10BaseT/100BaseTx Ethernet
- Driver automatically finds NetCom devices in the network
- Configuration over Driver Panels, serial Port, Telnet, WEB Browser, SNMP
- Automatic mode switching between Driver and Raw Mode
- Supports TCP/IP, UDP, Telnet, DHCP, ICMP, HTTP, SNMP V1/2c/3, DNS, PPP, openVPN
- Supports ART (Automatic Receive Transmit control)
- RS232/422/485 interface selectable by Switches and Software

## Overview

NetCom 413 PRO is an industrial-strength network-based serial device server for connecting one RS232/422/485 device like CNC, PLC, weighing scale, scanner and other devices directly to a network running TCP/IP.

NetCom 413 PRO provides completely secured communication for configuration and to the attached serial device, this is implemented by openVPN tunnel software. Further a serial port can control a modem for Dial-In and -Out via PPP.

In addition to allowing serial devices to get networked, any host (PC Server or Workstation) without network access can also access remote serial device via adding NetCom devices to the existing serial port. NetCom 413 PRO can be configured over Driver Panels, WEB Browser, serial Port, Telnet, SNMP and serves as a transparent serial channel without platform and distance limitation.



## Specifications

Hardware	
Processor	ARM 9 166 MHz
I/O controller	16C950 or compatible
Memory	16MB SDRAM, 2 MB Flash
Connector type	RJ45 for Ethernet, DSUB 9 male for serial Port
Interface	
Ethernet interface	Auto-detecting 10BaseT/100BaseTx
Protocols	TCP/IP, UDP, Telnet, PPP, DHCP, ICMP, HTTP, LPD, SNMP V1/2c/3, DNS
Serial interface	RS232/422/485 selected by software or DIP-switch
No. of port	4, Speed up to 3.6 Mbps
Available Modes	RS232 full duplex RS422 full duplex RS485 4 wire, full duplex RS485 2 wire, half duplex, with echo RS485 2 wire, half duplex, without echo
Signals	RS232 Tx+, Rx-, RTS, CTS, DTR, DSR, DCD, RI, GND RS422 Tx+/-, Rx+/-, GND RS485 2 wire Data+/-, GND RS485 4 wire Tx+/-, Rx+/-, GND

## Specifications

RS485 Data control	Controlled by ART (Automatic Receive Transmit control) or RTS
<b>Performance</b>	
Speed	RS232: up to 921.6 kbps; RS422/485: up to 3.6 Mbps
Parity	None, even, odd, space, mark
Data bits	5, 6, 7, 8
Stop bits	1, 1.5, 2
IRQ	None
I/O address	None
<b>Operating Modes</b>	
Driver mode	VScom Driver for Windows NT 4.0, 2000, XP, 2003 and Vista ; Driver Mode creates virtual Com port
TCP Raw Server	Raw data transfer over TCP/IP. Accepts multiple incoming connections
TCP Raw Client	Raw data transfer over TCP/IP. Connects to multiple hosts or devices waiting for incoming connections
TCP Advanced Settings	Special settings for user-defined modes
UDP Mode	Raw data transfer by UDP. The NetCom is client and server at the same time. Timeout functionality, maximum packet size and a configurable trigger string define the packets of incoming data to send over UDP.
Null Modem Tunnel	Connecting two NetCom used as virtual null modem cable
IP Modem	The serial port emulates a standard modem. Operates by AT-commands, and dials to IP-Addresses instead of phone numbers. Windows "INF"-Driver provided for installation.
Print Server	The NetCom accepts print jobs, and spools them to the attached serial printer. Operates as of RFC1197, similar to the line printer daemon in Unix-systems
PPP net	A Modem attached to a serial port provides Dial-In/-Out. This allows access to the serial ports without a dedicated Ethernet connection.
<b>Power and Environment</b>	
Power requirements	9 - 30V DC, 500mA @ 12V
Power supply Adapter	12V DC, 1A. Connected by Terminal block
Dimensions	167 x 99 x 29 mm (W×L×H); 189 x 102 x 30 mm with DB9 connector & DIN rail mounting kit
Operating Temp	0°C - 60°C
Storage Temp	-20°C - 85°C
Case	SECC sheet metal (1mm)
Weight	0.4kg
<b>Special Features</b>	
Installation	Configuration utility automatically finds NetCom devices in the network.
Operating mode	Automatic mode switching between Driver and TCP RAW mode. With TCP Advanced settings it is possible to configure the NetCom for using it in multiple modes, so it decides automatically which mode should be used.
PPP Access	Dial-In to a modem attached to a serial port using Point to Point Protocol. TCP/IP is transported over the serial line, allowing access to configuration and the serial ports, even without Ethernet. A Dial-Out option is also provided.
Configuration	Configuration over Driver Panels, NetCom Manager, WEB Browser, serial console, Telnet, SNMP
SNMP	Special VScom MIB included
ART	Automatic Receive Transmit control for RS485
DNS	Domain Name Server support
Serial interface	Serial Interface configurable with DIP switch and by software
Firewall	Special precautions for Firewall environments
Firmware	Firmware update over WEB Browser, Telnet, ComPort
LEDs	LEDs for Power, serial Tx, Rx, Ethernet Link, Speed
<b>Security</b>	
Password access	Every capabilities of configuration use the same password including SNMP V3
Secure communication	OpenVPN tunnel provides security on Ethernet. The tunnel protects the configuration as well as all serial data. It is also usable across the Internet. Strong encryption by AES up to 256 bit keys.
<b>Approvals</b>	
EMC	FCC Class A, CE Class A
Environment	RoHS

## Ordering Information

Art. No	676
Product Name	NetCom 413 PRO
Packing List	NetCom 413 PRO, Power supply adapter 12V, 1000mA; CD-ROM with Driver and configuration software, Printed Quick Installation Guide
Optional Accessory	DK 35A - DIN-Rail mounting kit

VScom is offering a full range of serial communication solution for industrial application fields. Currently VScom designs and manufactures technologically advanced and cost effective Ethernet to Serial, RISC-Embedded Systems, CAN Bus to Serial, USB to Serial and PCI to Serial solutions. Envisioning the rapid growth in using Ethernet in different industrial fields. VScom is presently focusing on integration of LAN and Wireless LAN technology in serial connectivity products. VScom brand products have been in the market since 1995 and are known as high quality, reliable and long life devices. More information on the products is available at [www.vscom.de](http://www.vscom.de)