

## Model Information



### ■ Features

- Controls 4 RS232 devices located virtually anywhere via Ethernet, WLAN or Internet
- Port expansion over USB A connector
- LAN 1000/100/10 Ethernet auto-detect
- NetCom Manager 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
- SSL/AES-256 encryption on Ethernet, WLAN and Internet
- Optional: Wireless network IEEE 802.11b/g/n
- Optional: 3G/4G Modem for mobile networks

[Contact Online...](#)

# NetCom Plus 411

[Quick Link:](#) | [Features](#) | [More Pictures](#) | [Overview](#) | [Application](#) | [Interface](#) | [Serial Performance](#) | [Operating Modes](#) | [Power and Environment](#) | [Standards](#) | [Special Features](#) | [Security](#) | [Ordering Information](#) | [Options](#) | [Packaging](#) |

### ■ More Pictures



Port 1	Port 1
PortType (current)	RS232
Base Base	40000000
PortType	RS232
BaseRate	57600
Manual	38400
FlowType	None
Disable	0
Parity	None
StopBit	1
RTFifoLength	1024
RTFifoLevel	50%
TxFifoLength	1024
TxFifoLevel	50%

Click on the thumbnails for the large picture ...

[>Back to top](#)

### ■ Overview

The NetCom+ 411 is an industrial-strength network-based serial device servers for connecting four RS232 devices like CNC, PLC, weighting scale, scanner and others directly to a network running TCP/IP. The driver for Windows operating system installs Virtual Com Ports. The network is Gigabit Ethernet or optionally wireless by WLAN 802.11b/g/n, another option is Power over Ethernet.

The NetCom+ Servers use a state-of-the art RISC processor for low power and cost effective design. The 4 and 8 port models are very similar, including the case size. Power supply is via DC adapter, or optionally via Ethernet cable with POE IEEE 802.3af.

The serial ports enable data rates of up to 1000kbps. The ports allow every non-standard bitrate up to 1Mbps. See the [FAQ](#).

The USB 2.0 port supports [USB-COM Plus modules](#), to add more non-isolated and also isolated serial ports. The USB port may also connect external WLAN.

NetCom+ can be configured over Driver Panels, WEB Browser, serial Port, Telnet, SNMP and serves as a transparent serial channel without platform and distance limitation.

As modern devices the NetCom+ provide encryption for all communication.

## ■ Application

- Secure Remote Monitoring
- SCADA system
- Building automation system
- Self-service banking system
- Industrial / Factory / Laboratory automation
- Automatic warehouse control system
- Wafer fabrication system
- Other remote and distributed serial devices control

## ■ Interface

<b>Ethernet interface</b>	Auto-detecting 1000BaseT/100BaseTx/10BaseT (GigaLAN) Connector 8P8C (RJ45)
<b>Wireless interface</b>	Optional via internal module or external USB stick IEEE 802.11b/g/n operation in Access Point or Client Mode
<b>Protocols</b>	TCP/IP, UDP, Telnet, PPP, DHCP, ICMP, HTTP, LPD, SNMP V1/2c/3, DNS, openVPN
<b>No. of serial port</b>	4x DSUB 9 male connector (as PC) Expandable by <a href="#">USB-COM Plus modules</a>
<b>Serial interface</b>	RS232
<b>Signals</b>	TxD,RxD, RTS,CTS, DTR,DSR, DCD, GND
<b>USB port</b>	USB 2.0 High Speed, for WLAN and serial port expansion
<b>Mini PCIe slot</b>	Option: mPCIe over USB interface for 3G / 4G connections. Uses internal SIM slot.

[>Back to top](#)

## ■ Serial Performance

<b>Speed</b>	200 bps to 921.6/1000 kbps Supports non-standard baudrates
<b>Parity</b>	None, even, odd, mark, space
<b>Data bits</b>	7, 8
<b>Stop bits</b>	1, 2

[>Back to top](#)

## ■ Operating Modes

<b>Driver Mode</b>	VScom Driver for Windows up to 10, Server up to 2008 R2, both x86 and x64 Editions. The Driver creates a virtual Com port, using VScom NetCom protocol.
<b>Other Modes</b>	TCP Raw Server, TCP Raw Client, Null Modem Tunnel, UDP Mode, Print Server and IP Modem

[>Back to top](#)

## ■ Power and Environment

<b>Connector</b>	3-pin Terminal Block with Protective Earth
<b>Power requirements</b>	9 - 54V DC, 0.5A @ 12V, 6W
<b>Dimension</b>	196×147×44 mm <sup>3</sup> (W×L×H)
<b>Operating Temp</b>	-20°C - 65°C
<b>Storage Temp</b>	-20°C – 85°C
<b>Case</b>	SECC sheet metal (1mm)
<b>Weight</b>	0.9kg
<b>Mounting</b>	<ul style="list-style-type: none"><li>● 19-inch Rack</li><li>● Wall mount</li></ul>

[>Back to top](#)

## ■ Standards

### Declarations

CE

### Safety

EN 60950-1

### ESD

EN 61000-4-2 8kV contact 16kV air for

- Serial Ports
- USB
- Ethernet
- DC Power connector

### EMI

- EN 55022 Class A
- EN 61000-3-2
- EN 61000-3-3

### EMS (EN 55024)

EN 61000-4-3

### Power (EN 55024)

- EN 61000-4-4
- EN 61000-4-5
- EN 61000-4-6

[>Back to top](#)

## ■ Special Features

### Installation

For easy installation the configuration utility NetCom Manager automatically finds NetCom+ devices in the network

### Operating mode

Automatic mode switching between Driver and TCP RAW Server mode.

### 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.

### Configuration

Configuration over Driver Panels, NetCom Manager, WEB Browser, serial console, Telnet, SNMP

### Firewall

Special precautions for Firewall environments

### Firmware

Firmware update over WEB Browser

### LEDs

LEDs for Power, Ready, WLAN, serial Tx, Rx, Ethernet Link, Speed

[>Back to top](#)

## ■ Security

### Password access

Every capabilities of configuration use the same password including SNMP V3

### Secure communication

[OpenVPN™](#) SSL tunnel provides security on Ethernet and Internet. The tunnel protects configuration and serial data, especially convenient to use across the Internet. OpenVPN software is available for many systems, including Windows, Linux and Mac OS. Strong encryption by AES up to 256 bit keys.

[>Back to top](#)

## ■ Ordering Information

### 6670

NetCom Plus 411 (4x RS232, expandable)

[>Back to top](#)

## ■ Options

### 6689

WLAN Kit internal  
internal module 802.11b/g/n, pigtail and antenna  
Purchase time option, not for later retrofitting

### 6690

WLAN Kit external  
USB stick 802.11b/g/n, antenna

6031

Power supply adapter 12V DC, 1A

[661](#)

Serial Null-Modem adapter 9PF-9PF, change male to female

[>Back to top](#)

## ■ Packaging

### Packing list

- NetCom Plus Serial Device Server
- Mounting brackets for 19-inch rack
- Wall mount plates
- Terminal block for Power Supply
- CD-ROM with Driver and configuration software

[>Back to top](#)

NetCom Plus 411

[>Back](#)



---

## Model NetCom Plus 411 with WLAN

[>Back](#)



NetCom Plus back side

[>Back](#)



---

# Rackmount Kit

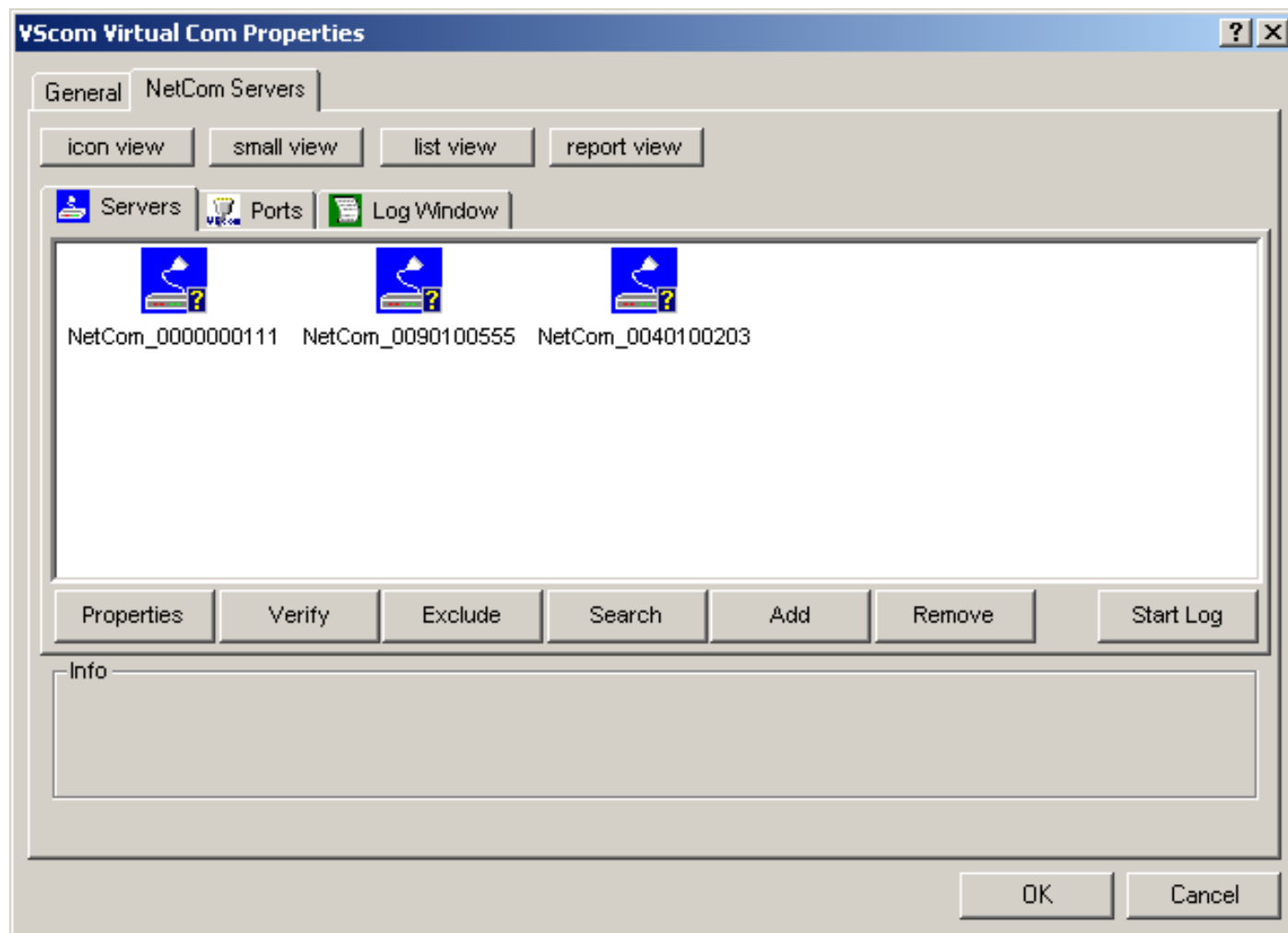
[>Back](#)





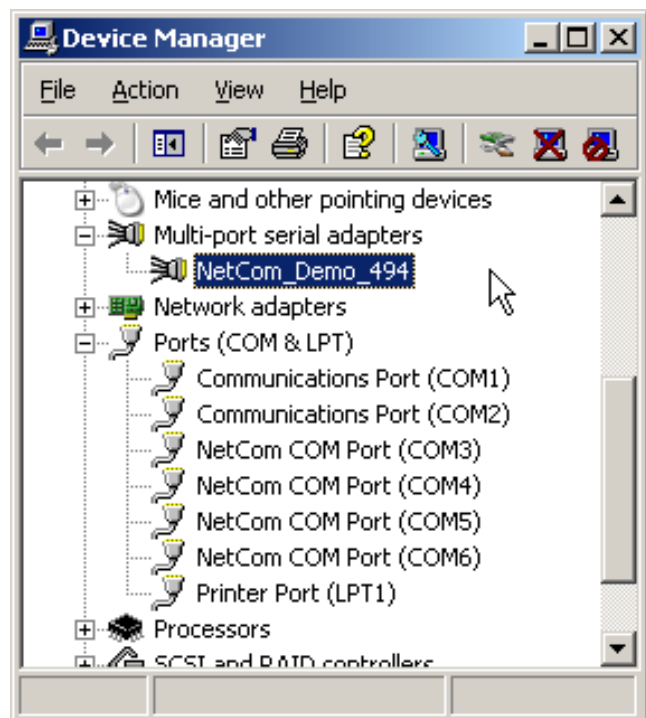
# NetCom Manager

[>Back](#)



## NetCom Plus in Device Manager

[>Back](#)



---

## Serial Port in Web Interface

[>Back](#)

Port 1	
PortType (current)	rs232
Baud Base	60000000
PortType ?	<input type="text" value="rs232"/>
Baudrate ?	<input type="text" value="38400"/>
Manual ?	38400
FlowType ?	<input type="text" value="None"/>
DataBit ?	<input type="text" value="8"/>
Parity ?	<input type="text" value="None"/>
StopBit ?	<input type="text" value="1"/>
RxFifoLength	1024
RxTriggerLevel ?	<input type="text" value="224"/>
TxFifoLength	1024
TxTriggerLevel ?	<input type="text" value="800"/>