Model Information

Main Features

- Ethernet to serial 1 port RS232/422/485
- Virtual Com Port driver for Windows
- Secure Server with latest SSL/AES-256 encryption
- Operation in Driver Mode, TCP/IP and many other
- Quick Configuration over Driver and Browser
- ESD protection on serial port, Ethernet, DC power
- DIN Rail and Wall mount options
- Wireless network IEEE 802.11b/g/n
- Port expansion over USB

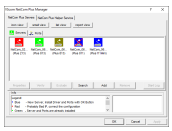
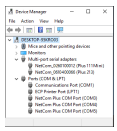
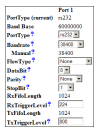
Contact Online...

NetCom Plus 123 WLAN

(NetCom 123 WLAN)

Quick Link: | Main Features | More Pictures | Overview | Ethernet Interface | Serial Interface | Serial Port Expansion | Software | Installation & Configuration | Security | viaVPN Remote Access (option) | Wireless interface | Power Requirements | Housing and Mounting | Environmental Data | Standards | MTBF (Mean Time Between Failures) | Warranty | Ordering Information | Options | Packaging |

More Pictures

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Click on the thumbnails for the large picture ...

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Overview

The Ethernet to Serial Gateways NetCom Plus connect RS232 or RS485 devices to a network running TCP/IP. These Serial Device Servers are rugged industrial devices with metal case and DIN-Rail or wall mounting, further supported by ESD protection on serial ports, power input and USB.
The NetCom+ 113 provides one RS232/422/485 port.

Windows Driver installs Com Ports

The driver for Windows operating system installs Virtual Com Ports. These operate in the same way as built-in ports, but via Ethernet or optional WLAN 802.11b/g/n. Easy-to-use Installation and Management software guides users trough the configuration.

High Speed Serial Ports, WLAN, Low Power

The serial ports allow data rates of up to 3.7Mbps in RS422/485 or 1000kbps in RS232 modes. The ports also allow every non-standard bitrate up to 150kbps, and many more (e.g. 1Mbps). See FAQ.
The USB 2.0 port supports USB-COM Plus modules, to add more standard or isolated serial ports.
WLAN.802.11b/g/n is built-in for operation alternative to Ethernet.
The gateways demand 4W of power or less. The flexible input allows for various sources of customers choice.

Easy Configuration, versatile Operation Modes

NetCom+ are configured over Driver Panels and WEB Browser. This is also possible via serial Port, Telnet or SNMP. NetCom+ provide Driver Mode, TCP/IP or UDP connection, and many operation modes beyond those.

Secure Remote Access for Monitoring

For NetCom Plus series there is a software option using the viaVPN Cloud system (www.viaVPN.com) to be remotely accessed and monitored over Internet. viaVPN provides secure and strongly encrypted access, without any reconfiguration of existing firewalls. The access to the firmware via Ethernet or WLAN is extended by viaVPN over Internet, protected by a VPN tunnel. If the Com port is not occupied by local access, also remote operation over Internet is possible.

Ethernet Interface

Speed/Type	100Mbps/10Mbps Auto-detecting
Connector	RJ45 (8P8C) 8 pin
LEDs	Power, WLAN, Ready, Ethernet Link / Speed

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Serial Interface

No. of Ports/Type	1 × RS232/422/485 selected by DIP-switch or software
Connector	DB-9 male
Protection	16kV ESD surge protection
Operating Modes	• RS232 • RS422 full duplex (120Ω on/off) • RS485 4 wire, full duplex (120Ω on/off) • RS485 2 wire, half duplex (120Ω on/off)
Configuration	One DIP switch sets operating mode and RS422/485 termination Also software can configure this No High/Low biasing resistors needed
Signals	• RS232: TxD,RxD, RTS,CTS, DTR,DSR, DCD, RI, GND • RS422: Tx+/-, Rx+/-, GND • RS485 4 wire: Tx+/-, Rx+/-, GND • RS485 2 wire: Data+/-, GND
RS485 Data Direction Control	ARTc (Automatic Receive Transmit control)
Data bits	5, 6, 7, 8
Stop bits	1, 2
Parity	None, Even, Odd, Mark, Space
Flow Control	RTS/CTS, XON/XOFF
Baudrate	• RS232: 180bps - 921.6/1000kbps • RS422: up to 3.7Mbps • RS485: up to 3.7Mbps Supports non-standard baudrates
LEDs	TxD/RxD for each port

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Serial Port Expansion

Connector	USB 2.0 High Speed type A, 500mA @5V at front side
Expansion Options	Connect USB-COM Plus (1 port) or USB-2COM Plus (2 ports) devices to add more serial ports to NetCom Plus server, even electrically isolated versions

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Software

Network Protocols	TCP, UDP, Telnet, PPP, DHCP, ICMP, UPnP, HTTP, LPD, SNMP V1/2c/3, DNS, openVPN
Virtual-COM Mode	Driver creates virtual COM ports via NetCom protocol © for Windows XP/7/8/10, Win-Server 2003 to 2008 R2 (x86/x64)
Socket Modes	TCP RAW Server, TCP RAW Client, UDP Mode, Print Server Automatic switching between Virtual-COM and TCP-RAW Server modes.
Tunnel Modes	Null Modem Tunnel and IP Modem

Fixed TTY Drivers	socat Tool, Linux OS

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Installation & Configuration

Installation	NetCom Plus Manager automatically finds NetCom Plus devices in the local network.
UPnP	With Network discovery enabled NetCom Plus servers announce their presence via UPnP making their IP visible.
Configuration	via WEB-Browser, Driver Panels, NetCom Manager, serial console, Telnet console or SNMP
Firewall	Virtual-COM mode works through firewalls
Firmware Update	via WEB Browser

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Security

Password Protection	for all available configuration options e.g. via WEB-Browser
Secure Server	create openVPN™ tunnels, for encrypted transmission of all serial and configuration data using high security SSL/TLS standards.

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viaVPN Remote Access (option)

Connect via Internet	viaVPN technology provides easy and secure access to remotely installed NetCom Plus servers for their configuration or for connecting their virtual COM ports through Internet. With the viaVPN option the NetCom Plus servers are no more limited to only work inside of a local network.
Security	All communications use openVPN-tunnels encrypted by SSL/TLS and AES-256 standards.
Firewall friendly	No Reconfiguration of firewalls is required for viaVPN remote access.

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Wireless interface

Standards	2.4GHz Radio, supports IEEE Std. 802.11b/g/n
WLAN Modes	Access Point (AP) or Client (Station)
TX Power	802.11b: Typ. 15.5dBm ±1.5 dBm @ 1Mbps (DSSS) Typ. 15.5dBm ±1.5 dBm @ 11Mbps (OFDM) 802.11g: Typ. 15.6dBm ±1.5 dBm @ 6Mbps (CCK) Typ. 13.5dBm ±1.5 dBm @ 54Mbps (OFDM) 802.11n: Typ. 13.4dBm ±1.5 dBm @ 6.5Mbps (OFDM) Typ. 13.3dBm ±1.5 dBm @ 150 Mbps(OFDM)
RX Sensitivity	802.11b: -95.6dBm @ 1Mbps, -88dBm @ 11Mbps 802.11g: -91.3dBm @ 6Mbps, -74.2dBm @ 54 Mbps 802.11n: -88.8dBm @ 6.5Mbps (20 MHz), -72dBm @ 72.2Mbps (20 MHz)
Transmission Rate	802.11b: 11Mbps 802.11g: 6 to 54Mbps 802.11n: 6.5 to 150Mbps
Transmission Distance	Up to 100m in open areas

Wireless security	• WEP • WPA • WPA2 • WPA2-Enterprise (IEEE 802.1X/RADIUS)
Antenna Connector	RP (Reverse-Polarity) SMA

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Power Requirements

Input Voltage	9 - 54V DC
Power Consumption	0.25A @ 12V, 2.7W max
Connector	3-pin Terminal Block

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Housing and Mounting

Case	0.8mm sheet metal
Weight	w/o box 0.25kg; w/h box 0.40kg
Dimensions	115×73×25 mm³ (W×L×H)
Packaged	150×107×48 mm³
Mounting	• DIN-Rail (optional) • Wall mount (optional)

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Environmental Data

Operating Temp	−20°C - 65°C
Storage Temp	−20°C – 85°C
Ambient Humidity	5-95% non condensing

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Standards

Declarations	CE, FCC
EMI	• EN 55022 Class B • EN 61000-3-2: Limits of harmonic current emissions • EN 61000-3-3: Limitation of voltage changes • 47 CFR FCC Part 15 Subpart B
EMS (EN 55024)	• EN 61000-4-3: Radiated RFI • EN 61000-4-4: Electrical Fast Transient • EN 61000-4-5: Surge • EN 61000-4-6: Induced RFI • EN 61000-4-8: Power Frequency Magnetic Field • EN 61000-4-11: Power supply dips
ESD	EN 61000-4-2 4kV contact 8kV air for • Serial Port • USB • Ethernet • DC Power connector

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MTBF (Mean Time Between Failures)

MTBF	35.7 Years @ 25°C 12.5 Years @ 45°C
Standard	Telcordia (Bellcore) Standard; RelCalc. 5.0 BELL-7

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Warranty

Warranty Period	2 years

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Ordering Information

6646	NetCom Plus 123 WLAN (1x RS232/422/485, expandable)

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Options

6031	Power adapter 110-230V AC to 12V @1A, DC, EU plug
6034	Power adapter 110-230V AC to 12V @1A, DC, US plug
6679	Activate option viaVPN for secure remote access over Internet
6692	DK-NCP DIN-Rail mounting kit (clamp on rear side)
6693	WK-NCP Wallmount kit
662	DK 35A Plastic DIN-Rail mounting kit
663	DB9F-to-TB/5Pins for free wiring option
6061	DB9F-to-RJ45 for changing from DB9 to CAT5 wiring (Optimised for RS422/485 operating modes)
6062	RJ45-to-DB9M for changing back from CAT5 to DB9 wiring (Required to match the DB9 pinout at NetCom Plus)
661	Serial Null-Modem adapter 9PF-9PF, change male to female

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Packaging

Packing list

- NetCom Plus Serial Device Server
- Antenna
- Terminal block for Power Supply

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NetCom Plus Manager

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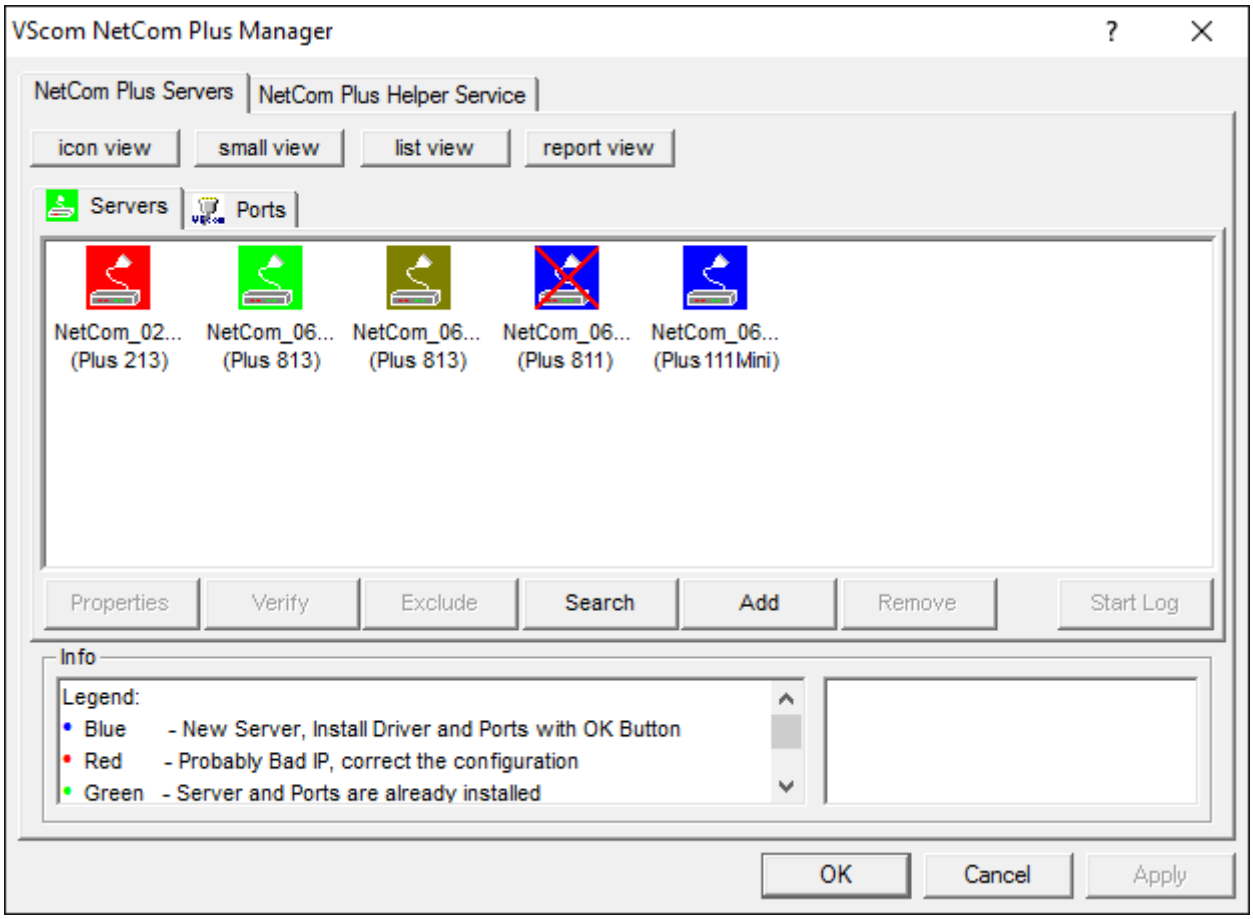

NetCom Plus in Device Manager

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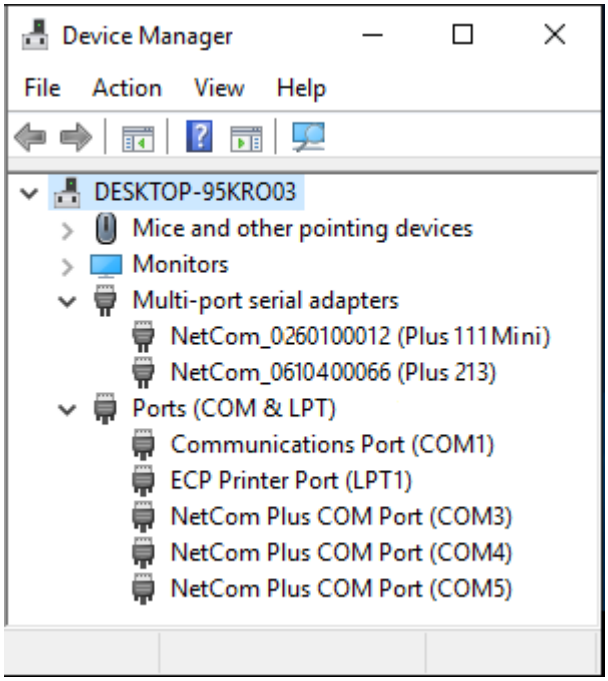

Serial Port in Web Interface

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	Port 1
PortType (current)	rs232
Baud Base	60000000
PortType ?	rs232
Baudrate ?	38400
Manual ?	38400
FlowType ?	None
DataBit ?	8
Parity ?	None
StopBit ?	1
RxFifoLength	1024
RxTriggerLevel ?	224
TxFifoLength	1024
TxTriggerLevel ?	800

Wall Mount Kit

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DIN-Rail with Wall Mount

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DIN-Rail Kit DK-NCP

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DK-NCP: NetCom on DIN-Rail

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DSK-NCP: Side-mount on DIN-Rail

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Remote Access option

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