

## NetCom 123 Plus WLAN

### Ethernet Interface

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

<b>No. of Ports/Type</b>	1 × RS232/422/485 selected by DIP-switch or software
<b>Connector</b>	DB-9 male
<b>Protection</b>	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

### 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

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

## ■ Installation & Configuration

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

## ■ Security

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

## ■ viaVPN Remote Access (option)

<b>Connect via Internet</b>	<a href="#">viaVPN</a> 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.
<b>Security</b>	All communications use openVPN-tunnels encrypted by SSL/TLS and AES-256 standards.
<b>Firewall friendly</b>	No Reconfiguration of firewalls is required for viaVPN remote access.



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## ■ Wireless interface

<b>Standards</b>	2.4GHz Radio, supports IEEE Std. 802.11b/g/n
<b>WLAN Modes</b>	Access Point (AP) or Client (Station)
<b>TX Power</b>	802.11b: Typ. 15.5dBm $\pm$ 1.5 dBm @ 1Mbps (DSSS) Typ. 15.5dBm $\pm$ 1.5 dBm @ 11Mbps (OFDM) 802.11g: Typ. 15.6dBm $\pm$ 1.5 dBm @ 6Mbps (CCK) Typ. 13.5dBm $\pm$ 1.5 dBm @ 54Mbps (OFDM) 802.11n: Typ. 13.4dBm $\pm$ 1.5 dBm @ 6.5Mbps (OFDM) Typ. 13.3dBm $\pm$ 1.5 dBm @ 150 Mbps(OFDM)
<b>RX Sensitivity</b>	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)
<b>Transmission Rate</b>	802.11b: 11Mbps 802.11g: 6 to 54Mbps 802.11n: 6.5 to 150Mbps
<b>Transmission Distance</b>	Up to 100m in open areas
<b>Wireless security</b>	<ul style="list-style-type: none"><li>• WEP</li><li>• WPA</li><li>• WPA2</li><li>• WPA2-Enterprise (IEEE 802.1X/RADIUS)</li></ul>
<b>Antenna Connector</b>	RP (Reverse-Polarity) SMA

## ■ Power Requirements

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

## ■ Housing and Mounting

<b>Case</b>	0.8mm sheet metal
<b>Weight</b>	w/o box 0.25kg; w/h box 0.40kg
<b>Dimensions</b>	115x73x25 mm <sup>3</sup> (WxLxH)
<b>Packaged</b>	150x107x48 mm <sup>3</sup>
<b>Mounting</b>	<ul style="list-style-type: none"><li>• DIN-Rail (optional)</li><li>• Wall mount (optional)</li></ul>



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## ■ Environmental Data

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

## ■ 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

## ■ 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

## ■ Warranty

**Warranty Period** 2 years



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