

Netcom Plus 113, 213, 413, 813, 1613

Ethernet Interface

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

Serial Interface

No. of Ports/Type	1, 2, 4, 8 & 16 × RS232/422/485 selected by DIP-switch or software
Connector	DB-9 male
Protection	16kV ESD surge protection
Operating Modes	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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



Gleneagles House, 31 Riverside Road, West Moors, BH22 0LG

Tel: 01202 861512

www.roalan.com

Registered in England No. 04591605

■ 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

■ 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

■ 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.

■ 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.



Gleneagles House, 31 Riverside Road, West Moors, BH22 0LG

Tel: 01202 861512

www.roalan.com

Registered in England No. 04591605

■ Wireless interface (option)

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 \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)
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	<ul style="list-style-type: none">• WEP• WPA• WPA2• WPA2-Enterprise (IEEE 802.1X/RADIUS)
Antenna Connector	RP (Reverse-Polarity) SMA
■ Power Requirements	
Input Voltage	9 - 54V DC POE: 15 - 54V DC
Power Consumption	1 & 2 ports 0.25A @ 12V, 2.7W max 4 & 8 ports 0.4A @ 12V, 5W max 16 ports 0.4A @ 12V, 5W max 0.8A @ 12V, 9W max when USB-8COM Plus is supplied via USB
Connector	3-pin Terminal Block



Gleneagles House, 31 Riverside Road, West Moors, BH22 0LG

Tel: 01202 861512

www.roalan.com

Registered in England No. 04591605

■ Housing and Mounting

Case	0.8mm sheet metal
Weight	1 & 2 ports w/o box 0.25kg; w/h box 0.35kg 4 & 8 ports 16 ports w/o box 1.9kg; w/h box 2.8kg
Dimensions	115x73x25 mm ³ (WxLxH)
Packaged	150x107x48 mm ³
Mounting	<ul style="list-style-type: none">• DIN-Rail (optional) Included in 4 & 8 ports• Wall mount (optional) Included in 4 & 8 ports• 16 Port 19" rack

■ 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	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Serial Port• USB• Ethernet• DC Power connector

■ MTBF (Mean Time Between Failures)

MTBF	41.5 Years @ 25°C 13.5 Years @ 45°C
-------------	--



Gleneagles House, 31 Riverside Road, West Moors, BH22 0LG

Tel: 01202 861512

www.roalan.com

Registered in England No. 04591605

Standard

Telcordia (Bellcore) Standard; RelCalc. 5.0 BELL-7

■ **Warranty**

Warranty Period

2 years



Gleneagles House, 31 Riverside Road, West Moors, BH22 0LG

Tel: 01202 861512

www.roalan.com

Registered in England No. 04591605