

## Overview

MorNet 113 is an industrial-strength network-based serial device server for connecting one RS232/422/485 device like CNC, PLC, weighting scale, scanner and other devices directly to the 10/100Mbps Ethernet network running TCP/IP.

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 MorNet devices to the existing serial port. NetCom 113 can be configured over Driver Panels, WEB Browser, serial Port, Telnet, SNMP and serves as a transparent serial channel without platform and distance limitation.



## Applications

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

## Features & Benefits

- Can control 1 x RS232/422/485 devices located virtually anywhere (via Ethernet or Internet)
- Lan interface 10BaseT/100BaseTx Ethernet
- Configuration utility automatically finds NetCom devices in the network
- Configuration over Driver Panels, serial Port, Telnet, WEB Browser, SNMP
- Automatic mode switching between Driver and TCP Raw Mode
- Support TCP/IP, UDP, Telnet, DHCP, ICMP, HTTP, SNMP V1/2c/3, DNS
- Supports ART (Automatic Receive Transmit control)
- RS232/422/485 interface selectable by Switches

## Hardware Specifications

**Processor:** ARM 7 TDMI 50MHz  
**I/O controller:** 16C550C or compatible  
**Memory:** 8MB SDRAM, 1 MB Flash

**Connector type:** RJ45 for LAN, DSUB 9 female for serial Port

### Interface:

**LAN interface:** Auto-detecting 10BaseT/100BaseTx  
**Protocols:** TCP/IP, UDP, Telnet, DHCP, ICMP, HTTP, SNMP V1/2c/3, DNS  
**Serial interface:** RS232  
**No. of port:** 1, Speed up to 460 Kbps  
**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/D, Rx/D, RTS/CTS, DTR, DSR, DCD, RI, GND  
 RS422: Tx+/-, Rx+/-, GND  
 RS485 2 wire Data+/-, GND  
 RS485 4 wire Tx+/-, Rx+/-, GND  
**RS485 Data Control:** Controlled by ART (Automatic Receive Transmit control) or RTS

### Performance:

**Speed:** Up to 460 Kbps  
**Parity:** None, even, odd, space, mark  
**Data bits:** 5, 6, 7, 8  
**Stop bits:** 1, 1.5, 2  
**IRQ:** None  
**I/O address:** None

### Operating Modes:

**Driver Mode:** VScOm Driver for Windows NT 4.0, 2000, XP and 2003  
 Driver Mode creates virtual Com port  
**TCP Raw Server:** Raw data transfer over TCP/IP. Waits for incoming connections  
**TCP Raw Client:** Raw data transfer over TCP/IP. Connects to a host or device waiting for incoming connections  
**TCP Advanced Settings:** Special settings for user-defined modes  
**UDP Mode:** Raw data transfer UDP. The NetCom is client and server at the same time. With the timeout functionality and a configurable trigger string it can make defined UDP packets of incoming data.  
**Null Modem Tunnel:** Connecting two MorNet used as virtual null modem cable

### Power and Environment:

**Power requirements:** 9 - 30V DC, 200mA @ 12V  
**Power supply Adapter:** 9V, 500mA  
**Dimension:** 73×115×27 mm<sup>3</sup> (W×L×H)  
 101×121×27 mm<sup>3</sup> with DB9 connector and ears

<b>Operating Temp:</b>	0°C - 60°C
<b>Storage Temp:</b>	-20°C - 85°C
<b>Case:</b>	SECC sheet metal (1mm)
<b>Weight:</b>	0.2kg

### Special Features:

**Installation:** Configuration utility automatically finds MorNet 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 MorNet for using it in multiple modes, so it decides automatically which mode should be used.

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

**SNMP:** Special VScom MIB included

**ART:** No

**DNS:** Domain Name Server support

**Serial interface:** Serial Interface configurable with external switch

**Firewall:** Special precautions for Firewall environments

**Firmware:** Firmware update over WEB Browser, Telnet, ComPort

**LEDs:** LEDs for Power, Tx, Rx, LAN Link, LAN Speed

### Security:

**Password access:** Every capabilities of configuration use the same password including SNMP V3

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## Ordering Information

### MorNet 113

- MorNet 113
- Power supply adapter 9V, 500mA
- Serial adapter Gender Changer
- CD-ROM with Driver and configuration software
- Printed Quick Installation Guide