CN2510 Series

8 and 16-port RS-232 Terminal Servers

Features

> **LCD control panel for easy on-site management**

> **Up to 16 dial-in users when operating as stand-alone remote access server**

> **PPP/SLIP with RADIUS authentication and RIP I/II routing protocol**

> **Real COM/TTY drivers for Windows and Linux**

> **±48 VDC for telecom applications**

: Remote Console Management

For most companies, the performance of IT equipment is critical to daily operation. To keep a server, router, PBX, or leased-line modem working properly, it is important to minimize downtime and troubleshoot faulty devices quickly. KVM is commonly used for in-band management of devices that are equipped with a screen and keyboard. However, RS-232 console access is often used as a last resort for all devices.

The CN2510 provides an easy console management solution in a convenient 1U rackmount package. With its RS-232 ports, connections are easily established to the console ports of network equipment, such as Unix servers or routers, for centralized management of the attached devices. Each device's RS-232 console port becomes a network-accessible node, giving users Telnet access from anywhere on the network for configuration and management of the device. Full modem control signals are supported, ensuring compatibility with a wide range of serial peripherals.
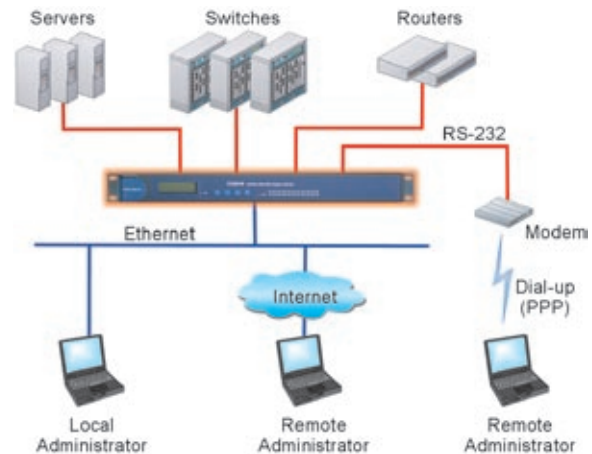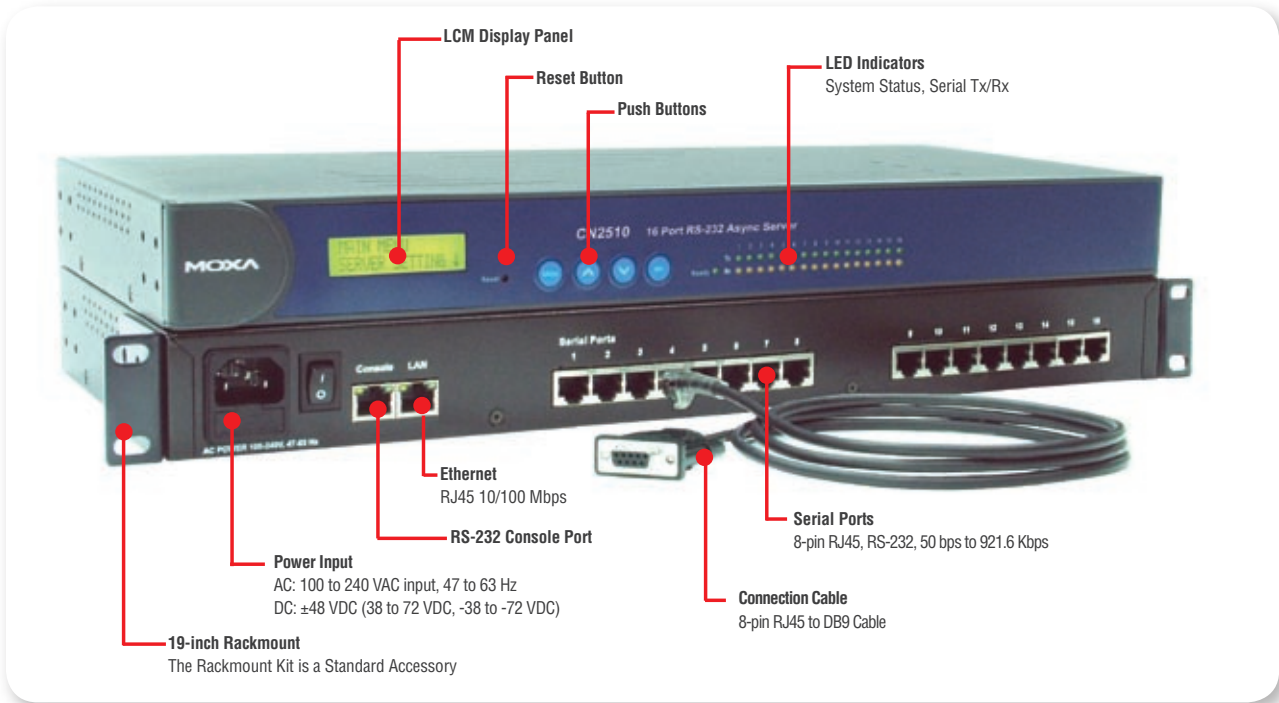
: Security Functions

User Authentication

It is very important that access is strictly controlled in a console management solution, and user privileges should be validated before a console port connection is allowed. The CN2510's authentication procedure involves verifying the username and password against an internal database or a RADIUS server.
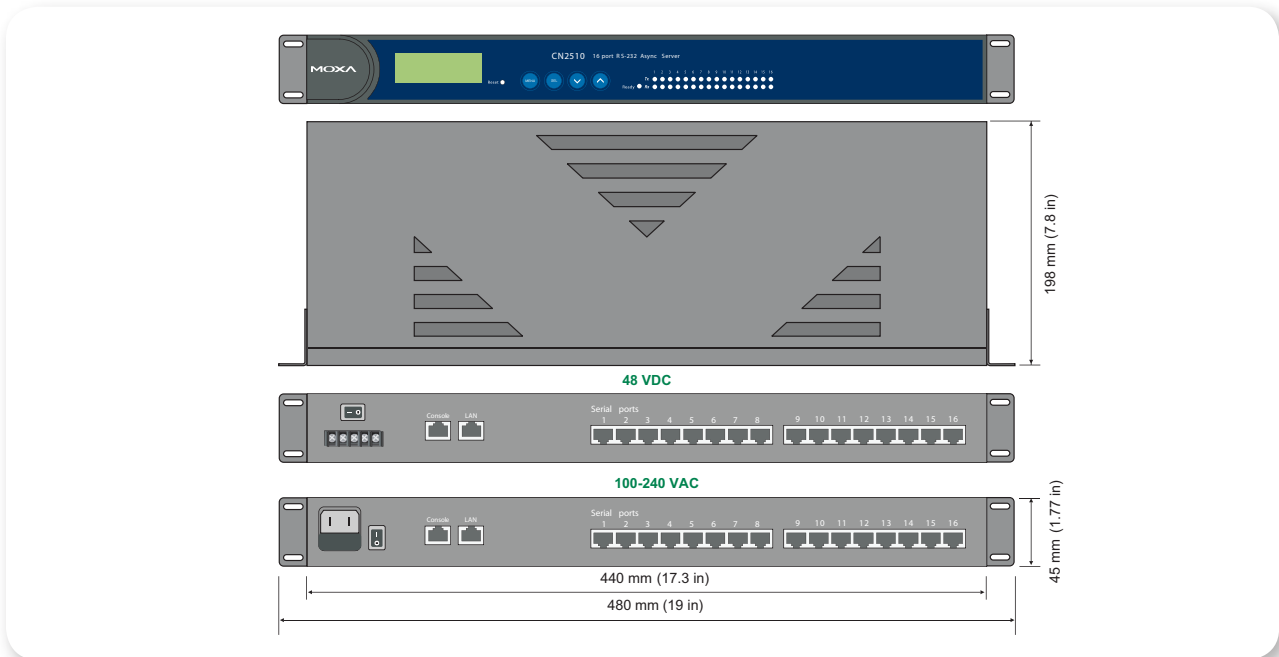
Dial-back

When a dial-up connection is used for out-of-band management, the CN2510 provides a convenient dial-back function. Instead of accepting a connection request directly, the CN2510 calls back the management host to establish the connection. The dial-back function helps ensure that only registered users or hosts can remotely connect to the network through the CN2510. It also helps consolidate long distance phone costs.
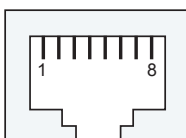
CN2510 Series

LCM Display Panel

Reset Button

Push Buttons

LED Indicators
System Status, Serial Tx/Rx

Ethernet
RJ45 10/100 Mbps

RS-232 Console Port

Power Input
AC: 100 to 240 VAC input, 47 to 63 Hz
DC: ±48 VDC (38 to 72 VDC, -38 to -72 VDC)

Serial Ports
8-pin RJ45, RS-232, 50 bps to 921.6 Kbps

Connection Cable
8-pin RJ45 to DB9 Cable

19-inch Rackmount
The Rackmount Kit is a Standard Accessory

Dimensions (unit = mm)

48 VDC

100-240 VAC

198 mm (7.8 in)

45 mm (1.77 in)

440 mm (17.3 in)

480 mm (19 in)

: Pin Assignment

RJ45 RS-232 Port

Pin	Signals
1	DSR (in)
2	RTS (out)
3	GND
4	TxD (out)

Pin	Signals
5	RxD (in)
6	DCD (in)
7	CTS (in)
8	DTR (out)

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Secure Terminal Servers/Terminal Servers

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Secure Terminal Servers/Terminal Servers

: Specifications

Hardware
CPU: 32-bit RISC

RAM: 4 MB

Flash ROM: 2 MB

I/O Controller: 16C550C compatible UART

LAN
Protection: Built-in 1.5 KV magnetic isolation

No. of Ports: 1

Speed: 10/100 Mbps

Serial
Interface: RS-232, 8-pin RJ45

No. of Ports: 16 ports (CN2510-16), 8 ports (CN2510-8)

Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Console Port: 1 RS-232 console port (8-pin RJ45)

Serial Line Protection: 15 KV ESD for all signals

Power Line Protection
1 KV Burst (EFT), EN61000-4-4

0.5 KV Surge, EN61000-4-5

Serial Communication Parameters
Parity: None, Even, Odd, Space, Mark

Data Bits: 5, 6, 7, 8

Stop Bit(s): 1, 1.5, 2

Flow Control: RTS/CTS, XON/XOFF

Speed: 50 bps to 921.6 Kbps

Software
Protocols: TCP/IP, UDP, ICMP, NetBUEI, DHCP, PPP, SLIP, CSLIP

Applications: Telnet, rlogin, rtelnet, DNS, LPD, RCP, WINS, Dial-on-Demand

Security: RADIUS, dialback, PAP, CHAP, local user / password

Management: SNMP MIB-II

IP Routing: Static, RIP-I, RIP-II.

Software Features
Utilities: Utility for Windows 95/98/ME/NT/2000/XP/2003

OS Driver Support: Windows 95/98/ME/NT/2000/XP/2003/XP x64/ 2003 x64 COM driver, Linux real TTY driver, SCO Unix, SCO OpenServer 5, UnixWare 7, UnixWare 2.1.x, SVR4.2

Fixed TTY Driver: SCO OpenServer 5, SCO Unixware 7.x, QNX

Real TTY Driver: Linux (kernel 2.2.x, 2.4.x, 2.6.x)

MOXA ASPP: Windows 9x/NT/ME/2K/XP/2003, Linux, UNIX

Socket: Standard BSD socket interface

Applications
Terminal Sessions: 8 sessions per port

Power Requirements
Power Input: AC: 100 to 240 VAC, 47 to 63 Hz

DC: ±48 VDC (38 to 72 VDC, -38 to -72 VDC)

Power Consumption: CN2510-8/16: 235 mA for 100V, 145 mA for 240V

CN2510-8/16-48V: 260 mA (at 48V max.)

Environment
Operating Temperature: 0 to 55°C (32 to 131°F), 5 to 95% RH

Storage Temperature: -20 to 70°C (-4 to 158°F), 5 to 95% RH

Gross Weight
CN2510-8: 3580g
CN2510-8-48: 3340g
CN2510-16: 3600g
CN2510-16-48: 3400g

Dimensions
440 x 198 x 45 mm (17.3 x 7.8 x 1.77 in)

Regulatory Approvals
EMC:

CE: EN55022 Class A / EN55024

FCC: FCC part 15 subpart B, Class A

Safety:

UL: UL60950

TÜV: EN60950

Warranty: 5 years

MTBF:
CN2510-8: 1346703 hours
CN2510-16: 101349 hours

: Ordering Information

CN2510-8: 8-port RS-232 Terminal Server

CN2510-8-48V: 8-port RS-232 Terminal Server

CN2510-16: 16-port RS-232 Terminal Server

CN2510-16-48V: 16-port RS-232 Terminal Server

Optional Accessories
Power Cord: See page 12-10

Serial Cable & Serial Adapter: See page 12-4

Package Checklist
• 1 CN2510

• Quick Installation Guide

• Document and Software CD-ROM

• Power Cord x 1 (AC model only)

• CBL-RJ45F9-150 x 1

• CBL-RJ45M25-150 x 1

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