

# CN2510 Series

## 8 and 16-port RS-232 terminal servers



### Features and Benefits

- LCD control panel for easy on-site management
- Supports up to 16 dial-in users when operating as a standalone remote access server
- Supports PPP/SLIP with RADIUS authentication and RIP I/II routing protocols
- Real COM and TTY drivers for Windows, Linux, and macOS
- 48 VDC for telecom applications (for CN2510-8/16-48V)

### Certifications

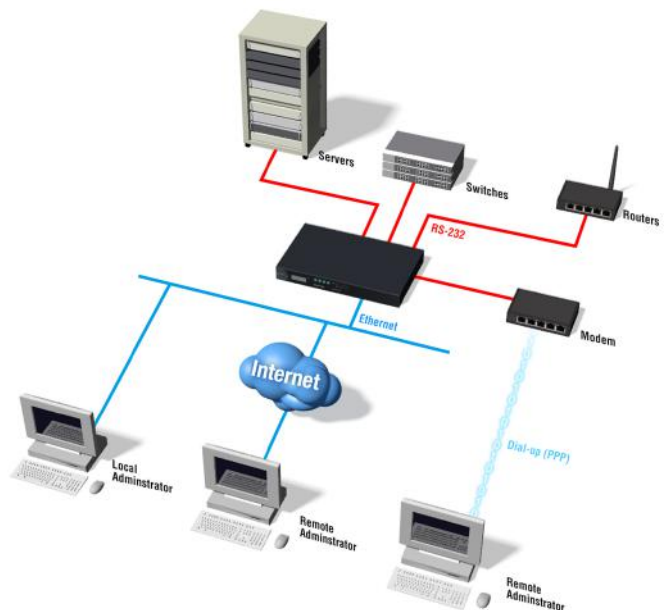


## Introduction

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.

### Remote Console Management

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.



### 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, and helps to minimize long-distance phone costs.

## Appearance



## Specifications

### Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)

1

### Ethernet Software Features

Management

Device Search Utility (DSU), DHCP Client, TCP/IP, UDP

MIB

MIB-II

Security

RADIUS

Unicast Routing

RIPV1/V2, Static Route

Windows Real COM Drivers

Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded

Linux Real TTY Drivers

Kernel versions: 2.4.x, 2.6.x, 3.x, 4.x, and 5.x

Fixed TTY Drivers

SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X, macOS 10.12, macOS 10.13, macOS 10.14, macOS 10.15

### Serial Interface

Connector

8-pin RJ45

No. of Ports

CN2510-8 models: 8  
CN2510-16 models: 16

Serial Standards

RS-232

Operation Modes

Terminal mode

Baudrate

50 bps to 921.6 kbps

Data Bits

5, 6, 7, 8

Stop Bits

1, 1.5, 2

Parity

None, Even, Odd, Space, Mark

Flow Control

None, RTS/CTS, XON/XOFF

### Power Parameters

Input Current

CN2510-8/16: 125 mA @ 110 VAC  
CN2510-8/16-48V: 180 mA @ 48 VDC

Input Voltage

AC models: 100 to 240 VAC (47 to 63 Hz)  
DC models:  $\pm$ 48 VDC (38 to 72 VDC, -38 to -72 VDC)

## Physical Characteristics

Housing	Metal
Installation	19-inch rack mounting
Dimensions	440 x 198 x 45 mm (17.3 x 7.8 x 1.77 in)
Weight	CN2510-8: 2,680 g (5.91 lb) CN2510-8-48V: 2,420 g (5.34 lb) CN2510-16: 2,700 g (5.95 lb) CN2510-16-48V: 2,480 g (5.27 lb)

## Environmental Limits

Operating Temperature	0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-20 to 70°C (-4 to 158°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

## Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	AC models: IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2.5 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF IEC 61000-4-11  DC models: IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2.5 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF
Safety	EN 60950-1, UL 60950-1

## MTBF

Time	CN2510-8: 857,279 hrs CN2510-8-48V: 850,673 hrs CN2510-16: 654,195 hrs CN2510-16-48V: 650,342 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

## Warranty

Warranty Period	5 years
Details	See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a>

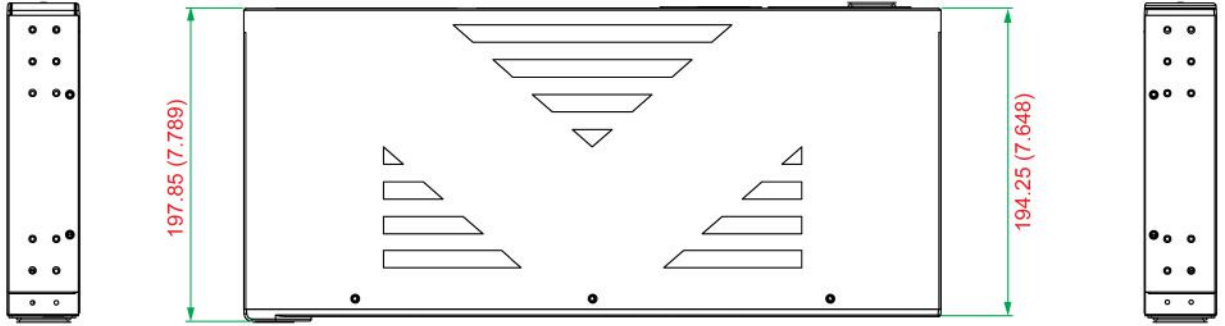
## Package Contents

Device	1 x CN2510 Series terminal server
Cable	1 x RJ45-to-DB9 console cable 1 x power cord, suitable for your region (AC models)
Installation Kit	1 x rack-mounting kit
Documentation	1 x quick installation guide 1 x warranty card

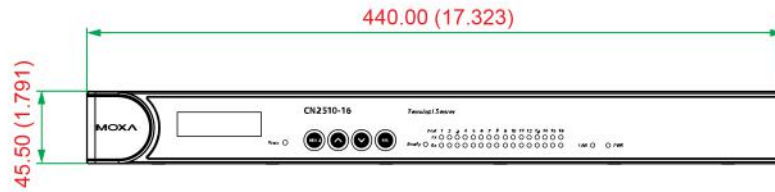
## Dimensions

Unit: mm (inch)

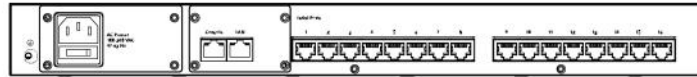
Top and Side Views



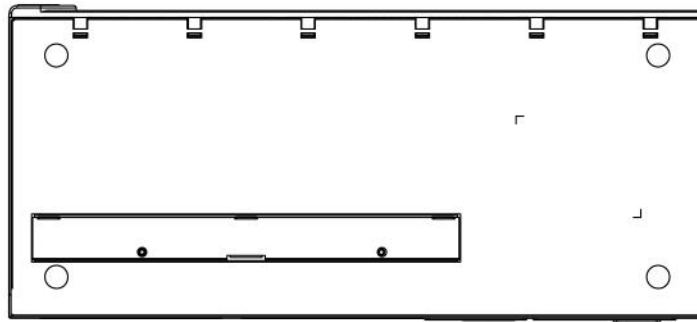
Front View



Rear View



Bottom View



## Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Serial Connector	Power Input
CN2510-8	RS-232	8	8-pin RJ45	100-240 VAC
CN2510-8-48V	RS-232	8	8-pin RJ45	±48 VDC
CN2510-16	RS-232	16	8-pin RJ45	100-240 VAC
CN2510-16-48V	RS-232	16	8-pin RJ45	±48 VDC

## Accessories (sold separately)

### Cables

CBL-RJ45F25-150	8-pin RJ45 to DB25 female serial cable, 1.5 m
CBL-RJ45F9-150	8-pin RJ45 to DB9 female serial cable, 1.5m
CBL-RJ45M25-150	8-pin RJ45 to DB25 male serial cable, 1.5m
CBL-RJ45M9-150	8-pin RJ45 to DB9 male serial cable, 1.5m
CBL-RJ45SF25-150	8-pin RJ45 to DB25 female serial cable with shielding, 1.5m
CBL-RJ45SF9-150	8-pin RJ45 to DB25 male serial cable with shielding, 1.5m

CBL-RJ45SM25-150	8-pin RJ45 to DB9 female serial cable with shielding, 1.5m
CBL-RJ45SM9-150	8-pin RJ45 to DB9 male serial cable with shielding, 1.5m

#### Power Cords

PWC-C13AU-3B-183	Power cord with Australian (AU) plug, 1.83 m
PWC-C13CN-3B-183	Power cord with three-prong China (CN) plug, 1.83 m
PWC-C13EU-3B-183	Power cord with Continental Europe (EU) plug, 1.83 m
PWC-C13JP-3B-183	Power cord with Japan (JP) plug, 7A/125V, 1.83 m
PWC-C13UK-3B-183	Power cord with United Kingdom (UK) plug, 1.83 m
PWC-C13US-3B-183	Power cord with United States (US) plug, 1.83 m

#### Rack-Mounting Kits

WK-45-01	Rack-mounting kit, 2 L-shaped plates, 8 screws, 45 x 57 x 2.5 mm
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