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

CE   FC

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.
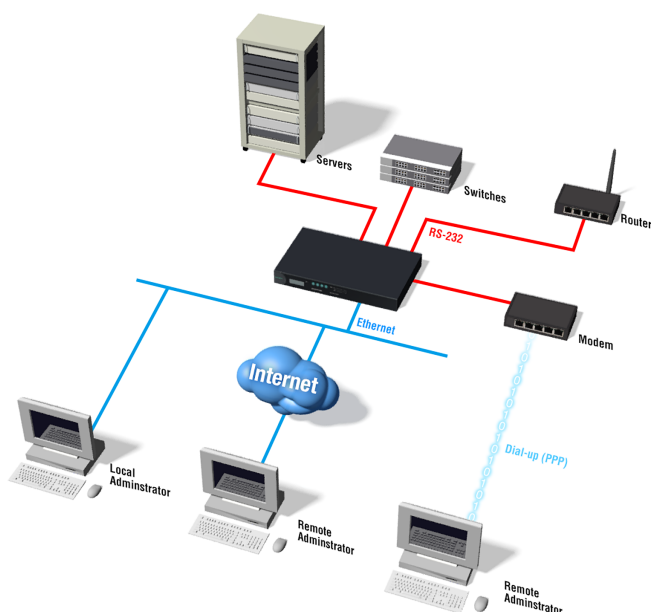
User Authentication

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.

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Appearance

Reset Button

IP Configuration Buttons

CN2510-16-48V   Terminal Server

LCD Panel

LED Indicators
System Status
Serial Tx/Rx

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 11, 10, 8.1, 8, 7, Vista, XP, ME, 98 and 95 Windows Server 2022, 2019, 2016, 2012 R2, 2012, 2008 R2, 2008, 2003, 2000 and NT Windows Embedded CE 5.0 and 6.0, Windows XP Embedded
Linux Real TTY Drivers	Kernel versions: 6.x, 5.x, 4.x, 3.x, 2.6.x and 2.4.x
Fixed TTY Drivers	macOS versions: 14, 13, 12, 11 and 10.1x SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Virtual Machine	VMWare ESXi (Windows 11 / 10) VMware Fusion (Windows on macOS 14, 13, 12, 11 and 10.1x) Parallels Desktop (Windows on macOS 14, 13, 12, 11 and 10.1x)
Arm®-based Platform Support	Windows 11 Linux Kernel 6.x, 5.x and 4.x macOS 14, 13, 12 and 11
Android API	Android 3.1.x and later

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

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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: ±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

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Warranty

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Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

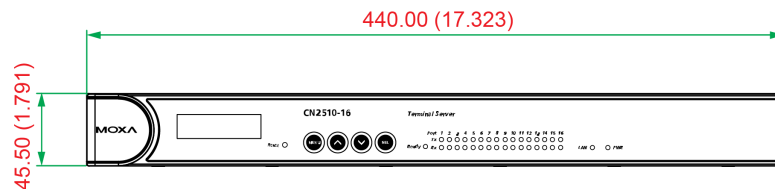|	
Device	1 x CN2510 Series terminal server
Cable	1 x RJ45-to-DB9 console cable 1 x power cord, suitable for your region (AC models)
Installation Kit	1 x rack-mounting kit
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)

Top and Side Views

197.85 (7.789)

194.25 (7.648)

Front View

440.00 (17.323)

45.50 (1.791)

CN2510-16   Terminal Server
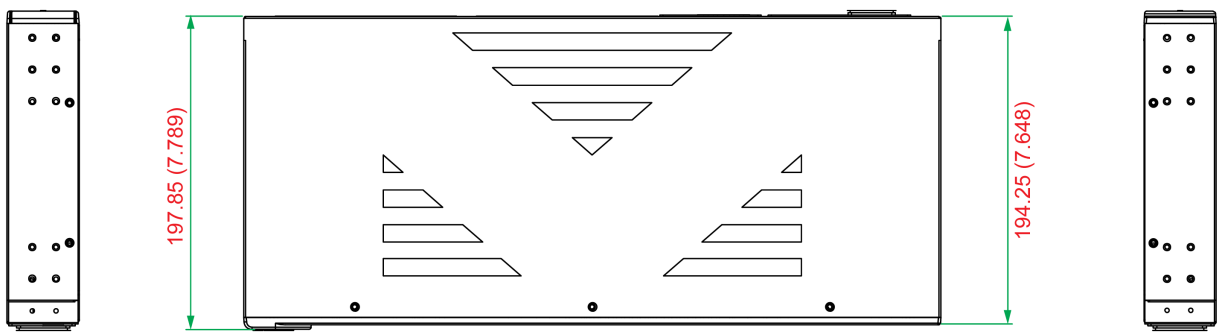
Rear View

Bottom View
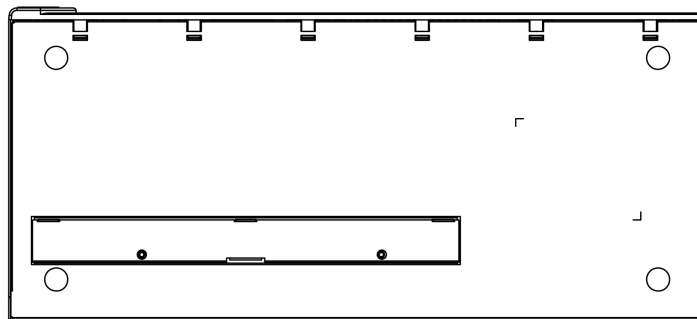
Ordering Information

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 DB9 female serial cable with shielding, 1.5m
CBL-RJ45SM25-150	8-pin RJ45 to DB25 male serial cable with shielding, 1.5m
CBL-RJ45SM9-150	8-pin RJ45 to DB9 male serial cable with shielding, 1.5m
CBL-RJ458P-Cisco-BK-180	8-pin RJ45 to 8-pin RJ45 serial cable, 1.8 m, for Cisco console port

Power Cords

PWC-C13AU-3B-183	Power cord with AU plug, 1.83 m
PWC-C13CN-3B-183	Power cord with three-prong CN plug, 1.83 m
PWC-C13EU-3B-183	Power cord with EU/KR plug, 1.83 m
PWC-C13JP-3B-183	Power cord with JP plug plug, 7A/125V, 1.83 m
PWC-C13UK-3B-183	Power cord with UK plug, 1.83 m
PWC-C13US-3B-183	Power cord with 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