CN2510 Series

8 and 16-port RS-232 terminal servers

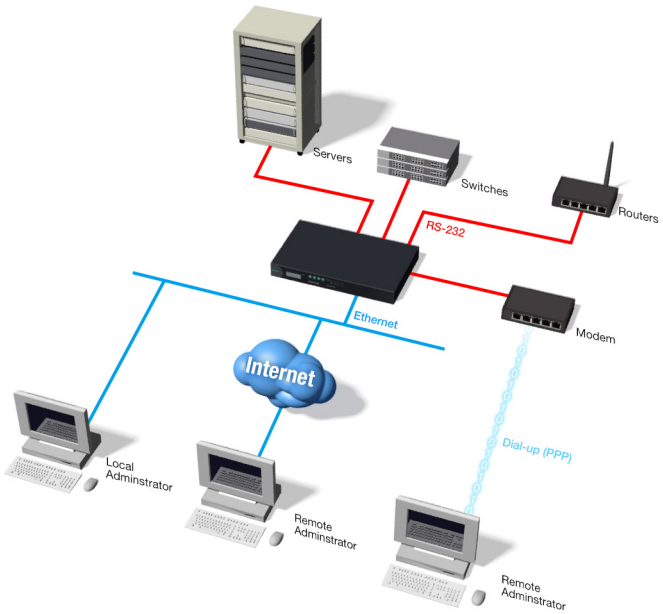
- LCD control panel for easy on-site management
- Supports up to 16 dial-in users when operating as a standalone remote access server
- PPP/SLIP with RADIUS authentication and RIP I/II routing protocols supported
- Real COM/TTY drivers for Windows and Linux
- ±48 VDC for telecom applications

Overview

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 Function

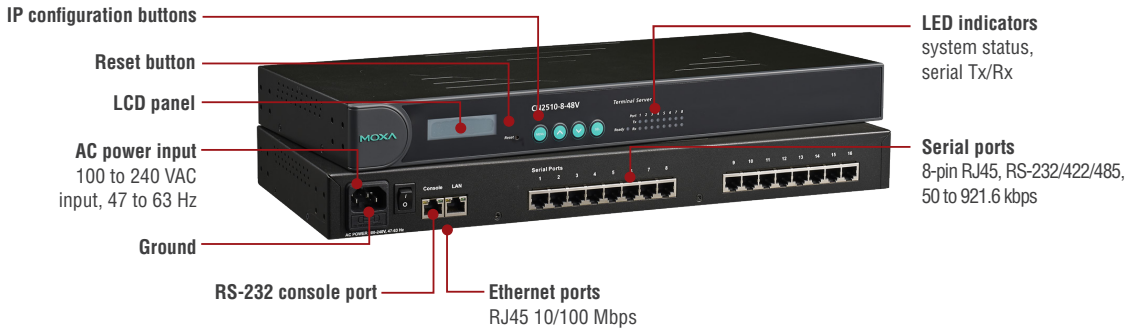
User Authentication

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
Number of Ports: 1
Speed: 10/100 Mbps
Connector: 8-pin RJ45

Serial Interface
Number of Ports:
CN2510-8: 8
CN2510-16: 16
Serial Standards: RS-232
Connector: 8-pin RJ45

Serial Communication Parameters
Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd, Space, Mark
Flow Control: RTS/CTS, XON/XOFF
Baudrate: 50 bps to 921.6 kbps

Software
Network Protocols: TCP/IP, UDP, ICMP, NetBUEI, DHCP, PPP, SLIP, CSLIP
Security Protocols: RADIUS, dialback, PAP, CHAP, local user / password
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 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Fixed TTY Drivers: SCO OpenServer 5, SCO Unixware 7.x, QNX
Linux Real TTY Drivers: Linux 2.4.x, 2.6.x, 3.x
Utilities: Device Search Utility and NPort Windows Driver manager
Management: SNMP MIB-II
IP Routing: Static, RIP-I, RIP-II

Operation Modes
Standard: Real COM, TCP Server, TCP Client, UDP, RFC2217, Terminal, Reverse Telnet, PPP, DRDAS, Redundant COM, Disabled

Applications
Terminal Sessions: 8 sessions per port

Physical Characteristics
Housing: Metal
Weight:
CN2510-8: 3,580 g (7.91 lb)
CN2510-8-48: 3,340 g (7.38 lb)
CN2510-16: 3,600 g (7.96 lb)
CN2510-16-48: 3,400 g (7.51 lb)
Dimensions: 440 x 198 x 45 mm (17.3 x 7.8 x 1.77 in)

Environmental Limits
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

Power Requirements
Input Voltage:
AC Models: 100 to 240 VAC, 47 to 63 Hz
DC Models: ±48 VDC (38 to 72 VDC, -38 to -72 VDC)
Input Current:
CN2510-8/16: 235 mA for 100 V, 145 mA for 240 V
CN2510-8/16-48V: 260 mA (at 48 V max.)

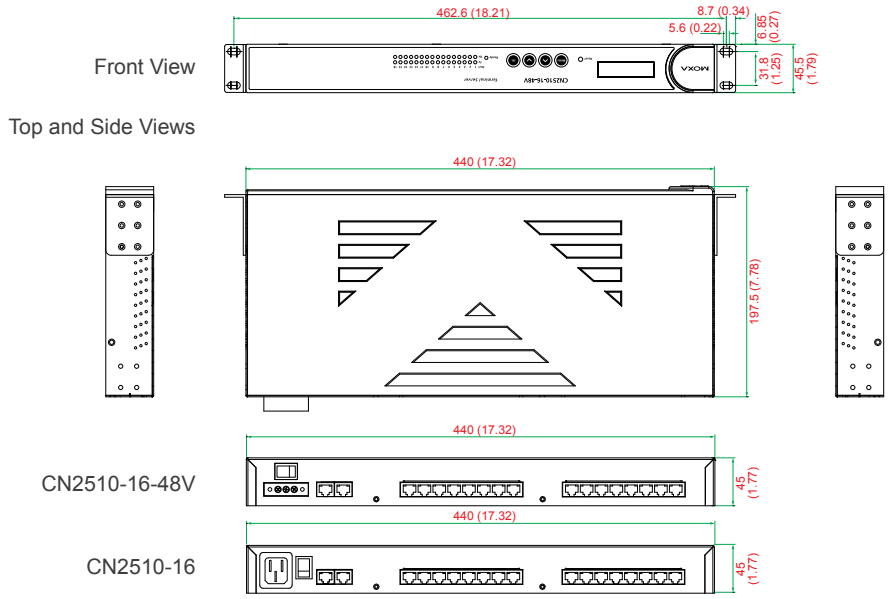
Standards and Certifications
Safety: UL 60950, TÜV EN60950
EMC: EN 55022/24
EMI: FCC Part 15B Class A
EMS:
AC models:
IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV
IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m
IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV
IEC 61000-4-5 Surge: Power: 2.5 kV; Signal: 1 kV
IEC 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 DIPs
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

MTBF (mean time between failures)
Time:
CN2510-8: 1,139,722 hrs
CN2510-16: 917,316 hrs
Standard:
Telcordia (Bellcore) Standard TR/SR

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

Dimensions

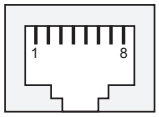
Unit: mm (inch)



Pin Assignment

8-pin RJ45 RS-232connector

PIN	RS-232
1	DSR
2	RTS
3	GND
4	TxD
5	RxD
6	DCD
7	CTS
8	DTR



Ordering Information

Available Models

CN2510-8: 8-port RS-232 Async Server, 100 to 240 VAC power input
CN2510-8-48V: 8-port RS-232 Async Server, ±48 VDC power input
CN2510-16: 16-port RS-232 Async Server, 100 to 240 VAC power input
CN2510-16-48V: 16-port RS-232 Async Server, ±48 VDC power input

Optional Accessories (can be purchased separately)

CBL-RJ45F25-150: 8-pin RJ45 to female DB25 cable, 150 cm
CBL-RJ45M25-150: 8-pin RJ45 to male DB25 cable, 150 cm
CBL-RJ45F9-150: 8-pin RJ45 to female DB9 cable, 150 cm
CBL-RJ45M9-150: 8-pin RJ45 to male DB9 cable, 150 cm

Note: One power cord suitable for your region is included in the product package. Additional power cords can be purchased separately. Please refer to the Power Accessory Selection Guide for details.

Package Checklist

- 1 CN2510 terminal server
- Serial cable: CBL-RJ45F9-150
- Serial cable: CBL-RJ45M25-150
- Power cord (AC models only)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

Power Accessory Selection Guide

Barrel Plug Type		Locking Barrel Plug	Power Cord					
O/P		12 VDC, 1.5 A, 100 to 240 VAC	10A/250V Power Cord, 183 cm					
Plug Type		CN	US	JP	EU	AU	UK	CN
Model Name		PWR-12150-CN-S2	PWC-C13US-3B-183	PWC-C13JP-3B-183	PWC-C13EU-3B-183	PWC-C13AU-3B-183	PWC-C13UK-3B-183	PWC-C13CN-3B-183
Appearance								
1 port	NPort 6150	✓	–	–	–	–	–	–
2 ports	NPort 6250	✓	–	–	–	–	–	–
	NPort 6250-M-SC	✓	–	–	–	–	–	–
	NPort 6250-S-SC	✓	–	–	–	–	–	–
4 ports	NPort 6450	✓	–	–	–	–	–	–
8 ports	NPort 6610-8	–	✓	✓	✓	✓	✓	✓
	NPort 6650-8	–	✓	✓	✓	✓	✓	✓
	CN2510-8	–	✓	✓	✓	✓	✓	✓
	CN2610-8	–	✓	✓	✓	✓	✓	✓
	CN2610-8-2AC	–	✓	✓	✓	✓	✓	✓
	CN2650-8	–	✓	✓	✓	✓	✓	✓
	CN2650-8-2AC	–	✓	✓	✓	✓	✓	✓
	CN2650I-8	–	✓	✓	✓	✓	✓	✓
	CN2650I-8-2AC	–	✓	✓	✓	✓	✓	✓
16 ports	NPort 6610-16	–	✓	✓	✓	✓	✓	✓
	NPort 6650-16	–	✓	✓	✓	✓	✓	✓
	CN2510-16	–	✓	✓	✓	✓	✓	✓
	CN2610-16	–	✓	✓	✓	✓	✓	✓
	CN2610-16-2AC	–	✓	✓	✓	✓	✓	✓
	CN2650-16	–	✓	✓	✓	✓	✓	✓
	CN2650-16-2AC	–	✓	✓	✓	✓	✓	✓
	CN2650I-16	–	✓	✓	✓	✓	✓	✓
	CN2650I-16-2AC	–	✓	✓	✓	✓	✓	✓
32 ports	NPort 6610-32	–	✓	✓	✓	✓	✓	✓

Barrel Plug Type		Locking barrel plug					
O/P		12 VDC, 2 A, 100 to 240 VAC (desktop type)	2.5A/250V Power Cord, 183 cm				
Plug Type		Must be used with one power cord	US	JP	EU	AU	UK
Model Name		PWR-12125-DT-S2	PWC-C7US-2B-183	PWC-C7JP-2B-183	PWC-C7EU-2B-183	PWC-C7AU-2B-183	PWC-C7UK-2B-183
Appearance							
1 port	NPort 6150	✓	✓	✓	✓	✓	✓
2 ports	NPort 6250	✓	✓	✓	✓	✓	✓
	NPort 6250-M-SC	✓	✓	✓	✓	✓	✓
	NPort 6250-S-SC	✓	✓	✓	✓	✓	✓
4 ports	NPort 6450	✓	✓	✓	✓	✓	✓
8 ports	NPort 6610-8	–	–	–	–	–	–
	NPort 6650-8	–	–	–	–	–	–
16 ports	NPort 6610-16	–	–	–	–	–	–
	NPort 6650-16	–	–	–	–	–	–
32 ports	NPort 6610-32	–	–	–	–	–	–