# **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

10

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.

4

# **CN2510 Series**



# **Dimensions** (unit = mm)



# **Pin Assignment**

#### RJ45 RS-232 Port

	Pin	Signals	Pin	Signals
1 1 8	1	DSR (in)	5	RxD (in)
	2	RTS (out)	6	DCD (in)
	3	GND	7	CTS (in)
	4	TxD (out)	8	DTR (out)

**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

### **:** Ordering Information

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

#### **Optional Accessories**

MOX/

Power Cord: See page 12-10 Serial Cable & Serial Adapter: See page 12-4 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

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

#### 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

4-26

