CN2600 Series

8 and 16-port RS-232/422/485 terminal servers with dual-LAN redundancy



Features and Benefits

- LCD panel for easy IP address configuration (excluding wide-temperature range models)
- Dual-LAN cards with two independent MAC addresses and IP addresses
- · Redundant COM function available when both LANs are active
- Dual-host redundancy can be used to add a backup PC to your system
- Dual-AC-power inputs (for AC models only)
- Real COM/TTY drivers for Windows and Linux
- Universal high-voltage range: 100 to 240 VAC or 88 to 300 VDC

Certifications

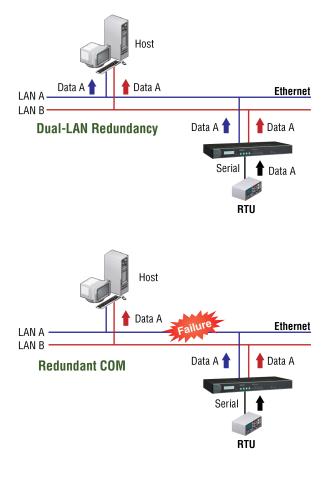
CE F©

Introduction

Redundancy is an important issue for industrial networks, and various types of solutions have been developed to provide alternative network paths when equipment or software failures occur. "Watchdog" hardware is installed to utilize redundant hardware, and a "Token"- switching software mechanism is applied. The CN2600 terminal server uses its built-in Dual-LAN ports to implement a "Redundant COM" mode that keeps your applications running uninterrupted.

Dual-LAN Redundancy

The CN2600 has two separate LAN ports that can be connected to separate LAN networks. Dual-LAN redundancy involves setting up two separate physical networks to connect the PC host with the CN2600 (the PC host also requires two LAN cards). If one connection fails, the PC host can still communicate with your serial devices over the alternative LAN connection.

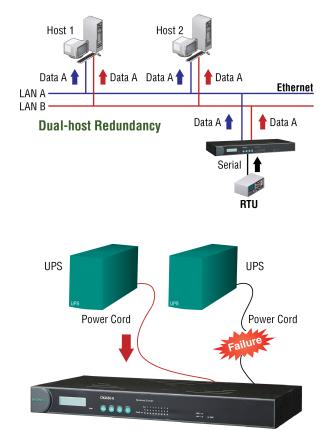


Redundant COM

Moxa offers "Redundant COM," an easy-to-use application to provide an alternative solution for network redundancy. When the CN2600 receives a data packet from a connected device, two identical data packets are sent over two independent LAN connections to prevent lost data packets if one LAN connection becomes unavailable. The CN2600 software is programmed to automatically discard duplicate data packets.

Dual-host Redundancy

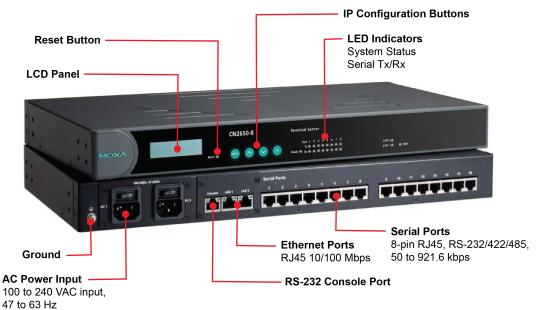
The CN2600's dual-LAN cards can also be used to set up "dual-host" redundancy. In this case, both networks (LAN A and LAN B in the figure) are connected to two different hosts. If either of the two hosts shuts down unexpectedly, the other host will still be able to communicate with serial devices connected to the CN2600.



Dual-AC Model Supported

Dual-power redundancy uses two power inputs and redundant internal power supplies to ensure that all of the CN2600's functions will be available, even in the event of power circuit failures.

Appearance



Specifications

| Ethernet Interface | |
|---------------------------------------|-------------------|
| 10/100BaseT(X) Ports (RJ45 connector) | 2 |
| Magnetic Isolation Protection | 1.5 kV (built-in) |



| Ethernet Software Features | |
|-----------------------------------|--|
| Configuration Options | CN2610-8/CN2610-16: Serial Console, Telnet Console, Windows Utility, Device Search Utility (DSU) CN2650-8/CN2650-16/CN2600-2AC models: Serial Console, Telnet Console, Windows Utility, Device Search Utility (DSU), Web console (HTTP/HTTPS) |
| Management | ARP, BOOTP, DDNS, DHCP Client, DNS, HTTP, IPv4, SMTP, SNMPv1/v2c/v3, TCP/IP, Telnet, UDP, ICMP, SLIP |
| МІВ | MIB-II |
| Security | HTTPS/SSL, RADIUS, SSH, PAP, CHAP |
| 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 (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 |
| Android API | Android 3.1.x and later |
| Serial Interface | |
| Connector | 8-pin RJ45 |
| No. of Ports | CN2610-8 models: 8 CN2610-16 models: 16 |
| Serial Standards | CN2610 models: RS-232 CN2650 models: RS-232, RS-422, RS-485 |
| Operation Modes | Real COM mode, TCP Server mode, TCP Client mode, UDP mode, RFC2217 mode, Terminal mode, Reverse Telnet mode, PPP mode, DRDAS mode, Redundant COM mode, Disabled |
| 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, DTR/DSR, XON/XOFF |
| Isolation | CN2650I Series: 2 kV |
| RS-485 Data Direction Control | ADDC® (automatic data direction control) |
| Pull High/Low Resistor for RS-485 | 1 kilo-ohm, 150 kilo-ohms |
| Terminator for RS-485 | 120 ohms |
| Console Port | RS-232 (TxD, RxD, GND), 8-pin RJ45 (19200, n, 8, 1) |
| Serial Signals | |
| RS-232 | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND |
| RS-422 | Tx+, Tx-, Rx+, Rx-, GND |
| RS-485-4w | Tx+, Tx-, Rx+, Rx-, GND |
| RS-485-2w | Data+, Data-, GND |



| No. of Power inputsCH2800 Series : 1 CH2800 Series : 20 mA # 110 VAC CH2800 Series : 20 mA # 110 VAC CH2800 Series : 20 mA # 110 VAC CH2800 Series : 20 mA # 180 VAC A 110 VAC A 110 VAC CH2800 Series : 100 CR280 S000 VDC)Input VoltageAC models: 100 to 240 VAC, 47 to 58 Hz Do models: 110 VC (88 to 300 VDC)Automatic Reboat TriggerBuilt-in WJDTAutomatic Reboat TriggerBuilt-in WJDTAutomatic Reboat TriggerBuilt-in WJDTAutomatic Reboat TriggerBuilt-in WJDTAutomatic Reboat TriggerBuilt-in WJDTHousingMetalInstallation19-Iach rack mountingDimensions (with cara)400 x 188 x 46.5 mm (16.9 x 7.80 x 1.77 in)Dimensions (with cara)400 x 188 x 46.5 mm (17.23 x 7.80 x 1.77 in)Dimensions (without earn)400 x 188 x 46.5 mm (17.23 x 7.80 x 1.77 in)VeightCh2810-47.04.20 (6.42 bi) Ch2810-42.04.04 (6.42 bi) Ch2810-42.04.04 (6.42 bi) Ch2810-42.04 (6.42 bi) Ch2810-42 bill (6.44 bi) Ch28200-44 bill (6.44 bi) Ch2820 | Power Parameters | |
|--|--|---|
| Ch2eb03 Gerles - HV models: 200 mA & 88 VDC Input Voltage AC models: 110 VDC (88 to 300 VDC) Peliability Built-in WDT Automatic Reboot Trigger Built-in WDT Aert Tools Built-in WDT Prysical Characteristics Housing Metal Installation 19-inch rack mounting Dimensions (with ears) 480 x 198 x 45.5 mm (7.32 x 7.30 x 1.77 in) Dimensions (without ears) 440 x 198 x 45.5 mm (7.32 x 7.30 x 1.77 in) Other Characteristics Weight Ch2e10 - (6/Ch2850-68.2,400 g (5.47 H)) (Ch2850-16-2A/CH2850-68.2,400 g (5.47 H)) (Ch2850-16-2A/CH2850-68.2,400 g (5.47 H)) (Ch2850-16-2A/CH2850-16-2 | No. of Power Inputs | |
| DC models: 110 VDC (88 to 300 VDC) Peliability Automatic Reboot Trigger Built- in WDT Alert Tools Built- in WDT Alert Tools Built- in WDT Housing Metal Installation 19-inch rack mounting Dimensions (with ears) 480 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Dimensions (without ears) 440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight Chosen (7.22 x 2.80 g (6.34 lb) Chosen - 16/Chosen - 1 | Input Current | |
| Automatic Reboot Trigger Built-in WUT Alert Tools Built-in buzzer and RTC (real-time clock) Physical Characteristics Housing Housing Metal Installation 19-inch rack mounting Dimensions (with ears) 480 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in) Dimensions (without ears) 440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight ChaSto - 24.02 (6.31 ib) (NASSID - 32/AC/PASSD - 24.02 (6.32 ib)) (NASSID - 32/AC/PASSD - 24.02 (6.32 ib)) (NASSID - 32/AC/PASSD - 24.02 (6.3 ib)) (NASSID - 34/AC/PASSD - 24.02 (7.9 ib)) (NASSID - 34/AC/PASSD - 24.02 (7.9 ib)) (NASSID - 34/AC (Ade 6 (8.3 ib)) (NASSID - 34/AC (Ade 6 (8.3 ib)) (NASSID - 34/AC (Ade 6 (8.3 ib)) (NASSID - 34/AC (Ade 6 (7.5 ib)) (NASSID - 34/AC (7.5 ib)) (NASSID - 34/ | Input Voltage | |
| Alert ToolsBuilt-in buzzer and RTC (real-time clock)Physical CharacteristicsMetalHousingMetalInstallation19-inch rack mountingDimensions (with ears)400 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in)Dimensions (without ears)400 x 198 x 45.5 mm (78.9 x 7.80 x 1.77 in)WeightON2610-16/CN2650-16-2.400 g (5.41 b) CN2610-16/2CO/CN2650-16-2.40C-T1.2,640 g (5.61 b) CN26510-16-2.40C/R12650-16-2.40C-T1.2,640 g (5.62 b) CN26510-16-2.40C (18.25 c)Furvionmental LimitsON2610-16/CN2650-16-2.40C-T1.2,640 g (5.62 b) CN26501-16-2.40C (18.25 c) CN26501-16-2.40C (18.25 c) CN26501-16-2.40C (18.25 c)Storage Temperature (package included)Storage Temperature (package included) CN26501-4-2.40C (18.25 c) CN26501-4-2.40C (19.25 c) CN26501-4-2.4 | Reliability | |
| Physical Characteristics Metal Installation 19-inch rack mounting Dimensions (with ears) 480 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in) Dimensions (without ears) 400 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight CN2810-40(CN2850-8: 2.401 g (5.31 lb) CN2810-42C(CN2850-4: 2.402 g (5.24 lb) CN2810-42C(CN2850-4: 2.401 g (5.24 lb) CN2810-4: 2.402 (CN2850-4: 2.401 g (5.24 lb) CN2810-4: 2.402 (CN2850-4: 2.402 g (5.24 lb) CN2810-4: 2.402 g (5.28 lb) CN28501-4: 2.402 g (5.28 lb) CN28501-4: 4.403 g (5.28 lb) CN28501-4: 4.410 g (5.28 lb) CN28501-4: 4.41 | Automatic Reboot Trigger | Built-in WDT |
| HousingMetalInstallation19-Inch rack mountingDimensions (with ears)480 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in)Dimensions (without ears)440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in)WeightCN8810-8/CN8550-8: 2.400 g (5.31 lb) CN8810-8/CN8550-18: 2.400 g (5.31 lb) CN8810-8/CN8550-18: 2.400 g (5.64 lb) CN8810-8/CN8550-18: 2.400 g (5.64 lb) CN8810-8:20/CN8550-18: 2.400 g (5.64 lb) CN8850-18: 2.400 g (5.62 lb) CN8550-18: 2.400 lb) C | Alert Tools | Built-in buzzer and RTC (real-time clock) |
| Installation 19-inch rack mounting Dimensions (with ears) 480 x 198 x 45.5 mm (13.9 x 7.80 x 1.77 in) Dimensions (without ears) 440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight CN2810-8/CN2850-8: 2.410 g (5.31 lb) CN2810-16/CN2850-8: 2.400 g (5.42 lb) CN2810-16/CN2850-16: 2.40C (14.24 lb) CN2810-16: 2.40C (14.25 lb) CN28501-8: 2.400 g (5.62 lb) Derivinomental Limits 50 Operating Temperature Standard Models: 0 to 55°C (20 to 131°F) CN28501-8-HVT Models: -40 to 75°C (40 to 185°F) Storage Temperature (package included) Standard Models: 0 to 55°C (20 to 131°F) CN2850-18-4VT TMC4850-18-4VT-T: -40 to 75°C (40 to 185°F) Storage Temperature (package included) Standard Models: 0 to 55°C (32 to 131°F) CN2850-18-4VT-Timedes Standards and Certifications E EMC Non -1 models: EN 55032/24 -1 models: EN 55032/2 | Physical Characteristics | |
| Dimensions (with ears) 480 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in) Dimensions (without ears) 440 x 199 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight CN2610-8/CN2650-8: 2.410 g (5.31 lb) CN2610-8/CN2650-8: 2.401 g (4.21 lb) CN2610-8/2.402 g (4.24 lb) CN26501-8: 2.405 g (4.24 lb) CN26501-8: 2.405 g (4.24 lb) CN26501-8: 2.405 g (4.24 lb) CN26501-8: 2.405 g (4.28 lb) CN26501-8: 4.404 g (8.48 lb) CN26501-8: 4.404 g (8.48 lb) CN26501-8: 4.404 g (8.48 lb) CN26501-8: 4.404 g (8.48 lb) CN26501-8: 4.405 g (6.27 lb) Storage Temperature (package included) Standard Models: 0 to 55°C (32 lo 131°F) CN26501-8: 4.407 g (5.27 lb) Storage Temperature (package included) Standard Models: 0 to 55°C (32 lo 131°F) CN26501-8: 4.407 rD'S°C (40 to 185°F) Ambient Relative Humidity 5 to 95% (non-condensing) Standards and Certifications EMI EMI CISPR 32, FCC Part 15B Class A EMS CiSPR 32, FCC Part 15B Class A EMS LiC 61000-4: 2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4: 4 EFT: Power 4 kV; Signai: 1 kV IEC 61000-4: 4 EFT: Power 4 kV; Signai: 3 V/m IEC 61000-4: 4 EFT: Power 4 kV; Signai: 3 V/m IEC 61000-4: 4 EFT: Power 4 kV; Signai: 3 V/m IEC 61000-4: 4 EFT: Power 4 kV; Signai: 3 V/m IEC 61000-4: 4 EFT: Power 4 kV; Signai: 1 kV | Housing | Metal |
| Dimensions (without ears) 440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) Weight CN2810-8/CN2850-8: 2,410 g (5.42 lb) CN2810-16/CN2850-16: 2,400 g (5.42 lb) CN2810-16-2.AC/CN2850-16: 2,AC/CN2850-16: 2,AC g (5.64 lb) CN28501-8: 3,402 g (5.61 lb) CN28501-8: 2,402 g (5.61 lb) CN28501-8: 2,402 g (5.71 lb) CN28501-8: 2,402 g (5.72 lb) CN28501-8: 2,402 g (5.72 lb) CN28501-8: 2,402 g (5.72 lb) CN28501-8: 2,402 g (5.73 lb) CN28501-8: 2,402 g (5.73 lb) Environmental Limits CN28501-8: 2,402 g (5.73 lb) CN28501-8: 4,042 g (5.73 lb) Operating Temperature Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 75°C (40 to 187°F) CN2850-14-VT. T0,848 g (8.48 lb) CN28501-8: 400 to 85°C (-40 to 187°F) Storage Temperature (package included) Standard Models: 0 to 55°C (32 to 131°F) CN2850-14-VT. T0,848 g (8.47 lb) Storage Temperature (package included) Standard Models: 0 to 55°C (40 to 187°F) CN2850-16-4V-T. 40 to 85°C (-40 to 187°F) Standard Models: D to 55°C (32 to 131°F) CN2850-16-4V-T40 to 75°C (40 to 187°F) CN2850-16-4V-T40 to 75°C (40 to 187°F) Standards and Certifications E E EMG Ion -1 models: EN 55032/24 -1 models: EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS AC models: IEC 6 1000-4-3 RS: 80 MHz to 1 GHz; 10 V/m IEC 6 1000-4-4 RS: 10 V/m IEC 6 1000-4-4 RS: 10 V/m IEC 6 1000-4-4 S Surge: Fower: 2, 50 N; Signal: 1 V/ IEC 6 1000-4-4 S Surge: Fower: 2, 50 N; Signal: 3 V/m IEC 6 1000-4-4 EFT: Power: 4 V; Signal: 2 V/ IEC 6 1000-4-4 EFT: Power: 4 V; Signal: 1 V/ IEC | Installation | 19-inch rack mounting |
| Weight CN2810-8/CN2850-8: 2.410 g (5.31 lb) CN2810-16/CN2850-18: 2.400 g (5.42 lb) CN2810-18: 2.02/CN2850-18: 2.2400 g (5.82 lb) CN28501-18: 2.02(CN2850-16-2AC-T: 2.640 g (5.82 lb) CN28501-18: 4.040 g (5.92 lb) CN28501-16: 4.040 g (5.92 lb) CN2850-116: 4.040 lb) CN2 | Dimensions (with ears) | 480 x 198 x 45.5 mm (18.9 x 7.80 x 1.77 in) |
| CA2610-16/C/N2650-16:2AC/C-1:40 to 185°F)Storage Temperature (package included)Standard Models: 0 to 55°C (32 to 131°F) CN2650-18:4V-T/CN2650-16:4V-T: 40 to 85°C (-40 to 185°F)Ambient Relative Humidity5 to 95% (non-condensing)Standards and CertificationsEMCEMSAC models: IEC 61000-4:2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4:2 ESD: Contact: 8 kV; Signal: 12 kV IEC 61000-4:2 ESD: Contact: 8 kV; Signal: 3 V/m IEC 61000-4:2 ESD: Contact: 8 kV; Signal: 3 V/m IEC 61000-4:2 ESD: Contact: 8 kV; Signal: 3 V/m IEC 61000-4:2 ESD: Contact: 4 kV; | Dimensions (without ears) | 440 x 198 x 45.5 mm (17.32 x 7.80 x 1.77 in) |
| Operating Temperature Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 75°C (-40 to 187°F) CN2650-HV-T Models: -40 to 85°C (-40 to 187°F) Storage Temperature (package included) Standard Models: 0 to 55°C (32 to 131°F) CN2650-8-2AC-T7/CN2650-16-2AC-T: -40 to 75°C (40 to 167°F) CN2650-8-2AC-T7/CN2650-16-2AC-T: -40 to 85°C (-40 to 185°F) Ambient Relative Humidity 5 to 95% (non-condensing) Standards and Certifications EMC EMC Non -1 models: EN 55032/24 -1 models: EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS AC models: IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 RC: 10 V/m IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m; Signal: 3 V/m IEC 61000-4-4 RC: 10 KV; Signal: 2 KV IEC 61000-4-3 RC: 10 KHZ: 10 80 MHZ: 3 V/m; Signal: 3 V/m IEC 61000-4-4 RC: 10 RC: 3 KV; Signal: 2 KV IEC 61000-4-4 RC: 10 RC: 3 KV; Signal: 2 KV IEC 61000-4-4 RC: 10 RC: 3 KV; Signal: 2 KV IEC 61000-4-4 RC: 10 RC: 3 KV; Signal: 2 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Air: 8 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Air: 8 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Air: 8 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Air: 8 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Air: 8 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Signal: 2 KV IEC 61000-4-4 RC: 2 SD: Contact: 4 KV; Signal: 2 KV | Weight | CN2610-16/CN2650-16: 2,460 g (5.42 lb) CN2610-8-2AC/CN2650-8-2AC/CN2650-8-2AC-T: 2,560 g (5.64 lb) CN2610-16-2AC/CN2650-16-2AC/CN2650-16-2AC-T: 2,640 g (5.82 lb) CN2650I-8: 3,907 g (8.61 lb) CN2650I-16: 4,046 g (8.92 lb) CN2650I-8-2AC: 4,284 g (9.44 lb) CN2650I-16-2AC: 4,423 g (9.75 lb) CN2650I-8-HV-T: 3,848 g (8.48 lb) |
| Wide Temp. Models: -40 to 75°C (-40 to 167°F) CN2650-HV-T Models: -40 to 85°C (-40 to 185°F)Storage Temperature (package included)Standard Models: 0 to 55°C (32 to 131°F) CN2650-8-2AC-T7/CN2650-16-2AC-T: -40 to 75°C (40 to 167°F) CN2650-8-2AC-T7/CN2650-16-2AC-T: -40 to 75°C (40 to 185°F)Ambient Relative Humidity5 to 95% (non-condensing)Standards and CertificationsEMCEMCNon -I models: EN 55032/24 -I models: EN 55032/35EMICISPR 32, FCC Part 15B Class AEMSAC 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: 1 kV IEC 61000-4-4 BFT: Power: 4 kV; Signal: 3 V/m IEC 61000-4-4 RFT: 9 Wer: 2 kV; Signal: 3 V/m IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 4 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 2 kV; Signal: 2 kV IEC 61000-4-4 RFT: 9 Wer: 2 kV; Signal: 1 kV | Environmental Limits | |
| CN2650-8-2AC-T/CN2650-16-2AC-T: -40 to 75°C (40 to 167°F) CN2650I-8-HV-T/CN2650I-16-HV-T: -40 to 85°C (-40 to 185°F)Ambient Relative Humidity5 to 95% (non-condensing)Standards and CertificationsEMCNon -I models: EN 55032/24 -I models: EN 55032/35EMICISPR 32, FCC Part 15B Class AEMSAC 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 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-4 EFT: Power: 2 kV; Signal: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-8 IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-8 IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-8 IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-4 EFT: Power: 4 kV; Signal: 1 kV | Operating Temperature | Wide Temp. Models: -40 to 75°C (-40 to 167°F) |
| Standards and Certifications EMC Non -1 models: EN 55032/24 -1 models: EN 55032/35 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 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV | Storage Temperature (package included) | CN2650-8-2AC-T/CN2650-16-2AC-T: -40 to 75°C (40 to 167°F) |
| EMCNon -1 models: EN 55032/24 -1 models: EN 55032/35EMICISPR 32, FCC Part 15B Class AEMSAC models: IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-2 ESD: Contact: 8 kV; Signal: 2 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 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-11 DIPsHVDC models: IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-8 IEC 61000-4-11 DIPs | Ambient Relative Humidity | 5 to 95% (non-condensing) |
| Imodels: EN 55032/35EMICISPR 32, FCC Part 15B Class AEMSAC 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 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-8 IEC 61000-4-11 DIPsHVDC models: IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV | Standards and Certifications | |
| 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 IEC 61000-4-11 DIPs HVDC models: IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV | EMC | |
| 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 IEC 61000-4-11 DIPs HVDC models: IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV | EMI | CISPR 32, FCC Part 15B Class A |
| | EMS | 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 IEC 61000-4-11 DIPs HVDC models: IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV |

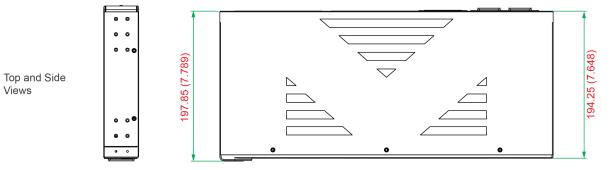


| | IEC 61000-4-8 |
|------------------|--|
| Safety | Non -I models: UL 60950-1 -I models: UL 62368-1 |
| Vibration | IEC 60068-2-6 |
| Freefall | IEC 60068-2-32 |
| Declaration | |
| Green Product | RoHS, CRoHS, WEEE |
| MTBF | |
| Time | CN2610-8: 831,925 hrs CN2610-16: 639,332 hrs CN2610-8-2AC/CN2650-8-2AC: 773,268 hrs CN2610-16-2AC: 604,346 hrs CN2650-8: 657,123 hrs CN2650-16: 457,175 hrs CN2650-16-2AC: 442,699 hrs CN26501-8/CN26501-8-2AC/CN2650-8-2AC-T: 190,562 hrs CN26501-8/CN26501-8-2AC/CN2650-16-2AC-T: 115,887 hrs CN26501-8-HV-T: 191,326 hrs CN26501-16-HV-T: 116,924 hrs |
| Standards | Telcordia (Bellcore) Standard TR/SR |
| Warranty | |
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |
| Package Contents | |
| Device | 1 x CN2600 Series terminal server |
| Installation Kit | 1 x rack-mounting kit |
| Cable | 1 x RJ45-to-DB9 console cable 1 x power cord, suitable for your region (AC models) |
| Documentation | 1 x quick installation guide 1 x warranty card |



Dimensions





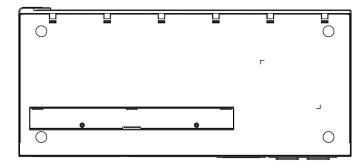


Front View

Rear View

Bottom View

| | 440.00 (17.323) |
|---------|--|
| 91) | |
| 50 (1.7 | CN2650-16-2AC Reminut / Server MOXAN Marco MoxAN Marco MoxAN Marco Marco SO Marco |
| 45. | |



Ordering Information

| Model Name | Serial Standards | No. of Serial Ports | Serial Connector | Isolation | No. of Power Inputs | Power Input | Operating Temp. |
|-----------------|------------------|---------------------|------------------|-----------|------------------------|-------------|-----------------|
| CN2610-8 | RS-232 | 8 | 8-pin RJ45 | - | 1 | 100-240 VAC | 0 to 55°C |
| CN2610-16 | RS-232 | 16 | 8-pin RJ45 | - | 1 | 100-240 VAC | 0 to 55°C |
| CN2610-8-2AC | RS-232 | 8 | 8-pin RJ45 | - | 2 | 100-240 VAC | 0 to 55°C |
| CN2610-16-2AC | RS-232 | 16 | 8-pin RJ45 | - | 2 | 100-240 VAC | 0 to 55°C |
| CN2650-8 | RS-232/422/485 | 8 | 8-pin RJ45 | - | 1 | 100-240 VAC | 0 to 55°C |
| CN2650-16 | RS-232/422/485 | 16 | 8-pin RJ45 | - | 1 | 100-240 VAC | 0 to 55°C |
| CN2650-8-2AC | RS-232/422/485 | 8 | 8-pin RJ45 | - | 2 | 100-240 VAC | 0 to 55°C |
| CN2650-8-2AC-T | RS-232/422/485 | 8 | 8-pin RJ45 | - | 2 | 100-240 VAC | -40 to 75°C |
| CN2650-16-2AC | RS-232/422/485 | 16 | 8-pin RJ45 | - | 2 | 100-240 VAC | 0 to 55°C |
| CN2650-16-2AC-T | RS-232/422/485 | 16 | 8-pin RJ45 | - | 2 | 100-240 VAC | -40 to 75°C |
| CN2650I-8 | RS-232/422/485 | 8 | DB9 male | 2 kV | 1 | 100-240 VAC | 0 to 55°C |
| CN2650I-16 | RS-232/422/485 | 16 | DB9 male | 2 kV | 1 | 100-240 VAC | 0 to 55°C |



| Model Name | Serial Standards | No. of Serial Ports | Serial Connector | Isolation | No. of Power Inputs | Power Input | Operating Temp. |
|-----------------|------------------|---------------------|------------------|-----------|------------------------|-------------|-----------------|
| CN2650I-8-2AC | RS-232/422/485 | 8 | DB9 male | 2 kV | 2 | 100-240 VAC | 0 to 55°C |
| CN2650I-16-2AC | RS-232/422/485 | 16 | DB9 male | 2 kV | 2 | 100-240 VAC | 0 to 55°C |
| CN2650I-8-HV-T | RS-232/422/485 | 8 | DB9 male | 2 kV | 1 | 88-300 VDC | -40 to 85°C |
| CN2650I-16-HV-T | RS-232/422/485 | 16 | DB9 male | 2 kV | 1 | 88-300 VDC | -40 to 85°C |

Accessories (sold separately)

| Cables | |
|--------------------|--|
| CBL-F9M9-20 | DB9 female to DB9 male serial cable, 20 cm |
| CBL-F9M9-150 | DB9 female to DB9 male serial cable, 1.5 m |
| CBL-RJ45M25-150 | 8-pin RJ45 to DB25 male serial cable, 1.5m |
| CBL-RJ45SF25-150 | 8-pin RJ45 to DB25 female serial cable with shielding, 1.5m |
| CBL-RJ45F25-150 | 8-pin RJ45 to DB25 female serial cable, 1.5 m |
| CBL-RJ45M9-150 | 8-pin RJ45 to DB9 male serial cable, 1.5m |
| CBL-RJ45SM9-150 | 8-pin RJ45 to DB9 male 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-RJ45F9-150 | 8-pin RJ45 to DB9 female serial cable, 1.5m |
| Connectors | |
| Mini DB9F-to-TB | DB9 female to terminal block connector |
| 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 |

© Moxa Inc. All rights reserved. Updated Mar 10, 2020.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.

