MOXA®

V2426A Series
Quick Installation Guide

First Edition, April 2015

Overview

The V2426A-C2 uses the Intel® Celeron® 1047UE processor and the V2426A-C7 uses the Intel® Core™ i7-3517UE processor. Both models feature 4 RS-232/422/485 serial ports, dual 10/100/1000 Mbps LAN ports, 3 USB 2.0 hosts, and 2 CFast sockets. The computers provide 2 DVI-I outputs, making them particularly well-suited for industrial applications such as rolling stock, SCADA, and automation systems.

Most importantly, the V2426A computers come with two expansion slots that enable you to install V2400A series expansion modules (for example, a 2-port CAN module, an HSDPA/GPS/WLAN module, an 8+8 port digital input/output module, a 2-port serial module, a mini PCI expansion module, or a mini-PCI Express module), providing greater flexibility for setting up various railway applications.

Package Checklist

Before installing your V2426A computer, verify that the package contains the following items:

- V2426A series embedded computer
- Wall mounting kit
- Documentation and software CD or DVD
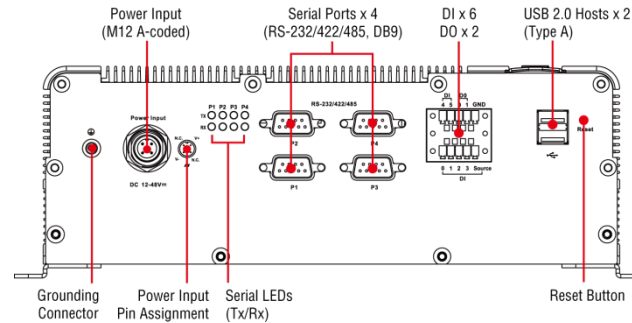- Quick installation guide (printed)
- Warranty card

NOTE: Please notify your sales representative if any of the above items are missing or damaged.

V2426A Panel Layout

V2426A Front View
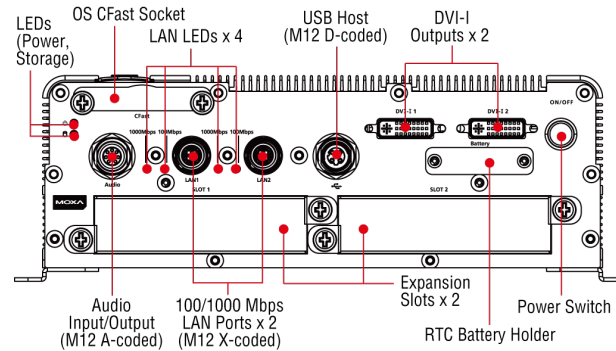
V2426A Rear View

LED Indicators

The following table describes the LED indicators located on the front and rear panels of the V2426A.

LED Name	LED Color	LED Function
Power	Green	Power is on and functioning normally.
	Off	Power is off or power error exists.
Storage	Yellow	CFast card/HDD/SSD is transmitting data
	Off	CFast card/HDD/SSD is not transmitting data
LAN (1 or 2)	Green	100 Mbps Ethernet mode
	Yellow	1000 Mbps Ethernet mode
	Off	10 Mbps or no activity
TX (P1-P4)	Green	Serial port is transmitting data
	Off	Serial port is not transmitting data
RX (P1-P4)	Yellow	Serial port is receiving data
	Off	Serial port is not receiving data

Installing the V2426A

The V2426A can be DIN-rail mounted, wall mounted, or VESA mounted. Some mounting kits may need to be purchased separately. Refer to the V2426A Hardware User's Manual for detailed installation instructions.

Connector Description

Power Connector

Connect the 12 to 48 VDC LPS or Class 2 power line to the V2426A M12 A-coded power connector. If the power is supplied properly, the Power LED will light up. The OS is ready when the Ready LED glows a solid green.

> ⚠️ **ATTENTION**
>
> The branch circuit overcurrent protection must be rated at a maximum of 5 A.

Grounding the V2426A

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting the power.
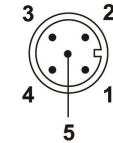
> ⚠️ **ATTENTION**
>
> This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

PIN	PWR
1	V+
2	N.C.
3	V–
4	N.C.
5	⏚

N.C. : Not connected

SG: The Shielded Ground (sometimes called Protected Ground) contact is the central pin of the power input connector. Connect the SG wire to an appropriate grounded metal surface.

DVI-I Outputs

The V2426A comes with 2 DVI-I female connectors for the DVI display. These output interfaces are all located on the front panel of the product. Be sure to use the correct cable to connect the computer to the display.

P/N: 1802024260010

CFast Slot

The V2426A has 2 CFast sockets. One slot is located on the front panel for OS storage and the other slot is located inside the V2426A for backup storage. Both slots support CFast Type-I/II with DMA mode.

To install an OS CFast card, remove the outer cover and insert the CFast card in the socket. When finished, push the cover into the socket and refasten the screws.

To install a CFast card for backup storage, purchase a CFast card through Moxa's CTO* service. Refer to the V2426A datasheet for more information.

*CTO = Configure to order

USB Hosts

The V2426A has one USB port with an M12 D-coded connector on the front panel, and two USB ports with type A connectors on the rear panel. These USB ports can be used to connect flash disks for storing large amounts of data.

SATA Connector

The V2426A has 1 SATA-I/II connector for 2.5" SSD/HDD storage expansion. To expand storage capacity, purchase an SSD/HDD and an internal storage kit* through Moxa's CTO** service.

*This must be purchased separately to install an SSD / HDD. For details, check the optional accessories section of the V2426A datasheet.

**CTO = Configure to order

Expansion Slots

The V2426A computers come with two expansion slots that supports different communication modules (for example, 2-port CAN module, or HSDPA, GPS, or WLAN module) to provide additional flexibility.

To remove an expansion module, first turn off the V2426A and remove the screws that secure the expansion module to the chassis; then, pull to remove the expansion module from the V2426A.

Ethernet Ports

Two 10/100/1000 Mbps Ethernet ports using M12 X-coded connectors are located on the front panel. The pin assignments are shown in the figure.
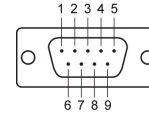
PIN	Con.
1	DA+
2	DA−
3	DB+
4	DB−
5	DD+
6	DD−
7	DC−
8	DC+

Serial Ports

The serial ports use DB9 connectors. Each port can be configured by software for RS-232, RS-422, or RS-485. The pin assignments for the ports are shown in the following table.

| Pin	RS-232	RS-422	RS-485 (4-wire)	RS-485 (2-wire)
1	DCD	TxDA(-)	TxDA(-)	–
2	RxD	TxDB(+)	TxDB(+)	–
3	TxD	RxDB(+)	RxDB(+)	DataB(+)
4	DTR	RxDA(-)	RxDA(-)	DataA(-)
5	GND	GND	GND	GND
6	DSR	–	–	–
7	RTS	–	–	–
8	CTS	–	–	–

DI/DO

The V2426A comes with a 6-ch digital input and 2-ch digital output on the terminal block connectors.

Audio Interface

The V2426A comes with an M12 A-coded audio connector for audio input and audio output, allowing users to connect a speaker or an earphone.

Pin No.	Audio
1	Line in – Right
2	GND
3	Line in – Jack Detect
4	Line in – Left
5	Line out – Left
6	Line out – Jack Detect
7	Line out – Right
8	GND
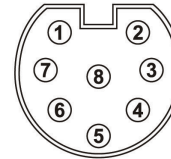
Reset Button

Press the "Reset Button" on the rear panel of the computer to reboot the system. The Ready LED blinks for the first 5 seconds, and then turns steady on after the system has rebooted successfully.

Real-Time Clock (RTC)

The V2426A's real-time clock is powered by a lithium battery. You can easily replace the battery yourself using an optional battery kit*. However, please note that there is a risk of explosion if the battery is replaced by an incorrect type of battery. Refer to the V2426A Hardware User's Manual or contact a qualified Moxa support engineer if you have any questions about the RTC battery.

*Moxa offers an "RTC battery kit" that you can use to easily replace the battery. For details, check the optional accessories section of the V2426A datasheet.

> ⚠️ **ATTENTION**
>
> There is a risk of explosion if the battery is replaced by a battery of the incorrect type.
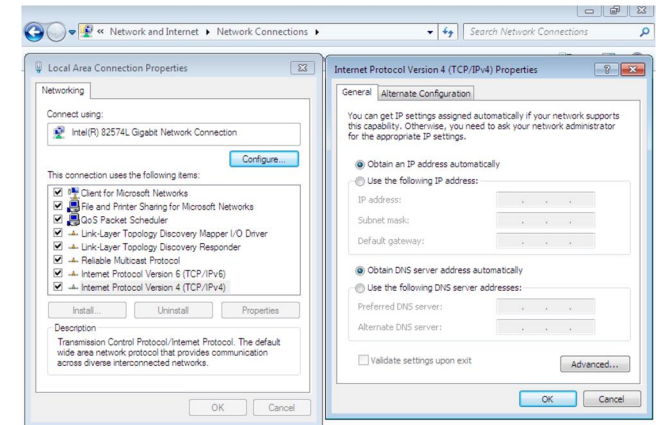
Powering on the V2426A

To power on the V2426A, connect the power cable to the V2426A's M12 A-coded power connector (located on the rear panel). Press the power button to turn on the computer. Note that the Shielded Ground wire should be connected to the central pin of the connector. It takes about 30 seconds for the system to boot up. Once the system is ready, the Power LED will light up.

Configuring the Ethernet Interface

W7E users should follow these steps:

1. Go to **Start > Control Panel > Network and Internet > View network status and tasks → Change adapter setting**.
2. In the Local Area Connection Properties screen, click **Internet Protocol (TCP/IP)** and then select **Properties**. Select **Internet Protocol Version 4**, and then click **Properties**.
3. Click **OK** after inputting the proper IP address and netmask.