

VersaView 6300B Wall Mount Box PCs

Bulletin Numbers 6300B-PBCx, 6300B-PBDx

Environment and Enclosure Information



ATTENTION: This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC 60664-1), at altitudes up to 2000 m (6561 ft) without derating.

This equipment is considered Group 1, Class A industrial equipment according to IEC/EN 61326-1. Without appropriate precautions, there can be potential difficulties with electromagnetic compatibility in other environments due to conducted as well as radiated disturbance.

This equipment is considered open equipment, which means it must be mounted in an enclosure where the equipment can be operated from the front panel.

The enclosure in which this equipment is installed must be accessed only with a key or tool, and only by trained and authorized personnel.

In addition to this publication, see the following:

- Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#), for more installation requirements
- UL 50, CSA C22.2 No. 94.1, and IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures

UL/cUL Mark Compliance

Equipment with the UL/cUL mark complies with the requirements of UL 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-1, and CSA C22.2 No. 61010-2-201. A copy of the certificate of compliance is available at rok.auto/certifications.

European Union Directive Compliance

This computer meets the European Union Directive requirements when installed within the European Union or EEA regions and have the CE marking. A copy of the declaration of the conformity is available at rok.auto/certifications.



ATTENTION: This equipment is intended to operate in an industrial or control room environment, which uses some form of power isolation from the public low-voltage mains. Some computer configurations cannot comply with the EN 61000-3-2 Harmonic Emissions standard as specified by the EMC Directive of the European Union. Obtain permission from the local power authority before you connect any computer configuration that draws more than 75 W of AC power directly from the public mains.

All I/O cables must be used only indoors.

Installation Guidelines

Follow these guidelines to make sure that your computer provides service with excellent reliability.

- When choosing the installation site, consider the following:
 - The site must have sufficient power
 - The site must be indoors and non-hazardous
 - The site must not expose the computer to direct sunlight
- The computers can operate in a surrounding air temperature range as follows:
 - 0...50 °C (32...122 °F) for 6300B-PBCx wall mount box PCs with the Intel Core i3 processor
 - 0...45 °C (32...113 °F) for 6300B-PBCx wall mount box PCs with the Intel Core i7 processor
 - 0...50 °C (32...122 °F) for 6300B-PBDx wall mount box PCs with the Intel Core i3 and Intel Core i7 processors

The surrounding air temperature must not exceed the maximum temperature for your computer, especially when the computer is mounted in an enclosure.

- The computers can be stored in a surrounding air temperature range of -10...+60 °C (14...140 °F).
- The humidity of the surrounding air must not exceed 80% noncondensing.

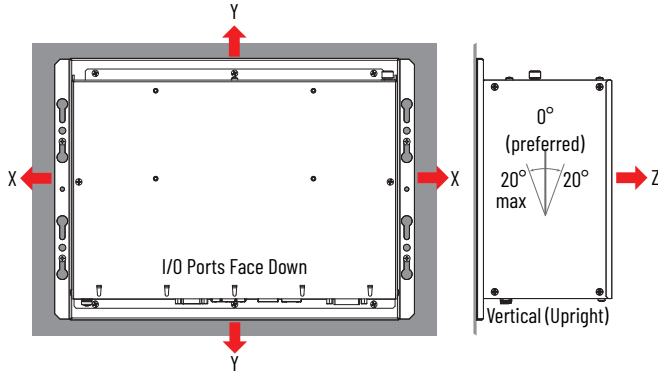
Mounting Requirements

Follow these requirements to mount the VersaView® 6300B wall mount box PC.

- Choose a suitable mounting height.
- For optimal performance, mount the computers in the vertical (upright) position, so the I/O ports face down.

IMPORTANT The vertical position can be tilted up to 20° forward or backward from the upright position. However, any tilt angle reduces the maximum operating temperature by 5 °C (41 °F).

- To help prevent overheating and to provide access to the I/O ports for cable connections, mount the computer so there are the following minimum clearances:
 - X and Z directions: 7 cm (2.75 in.)
 - Y direction: 10 cm (3.94 in.)

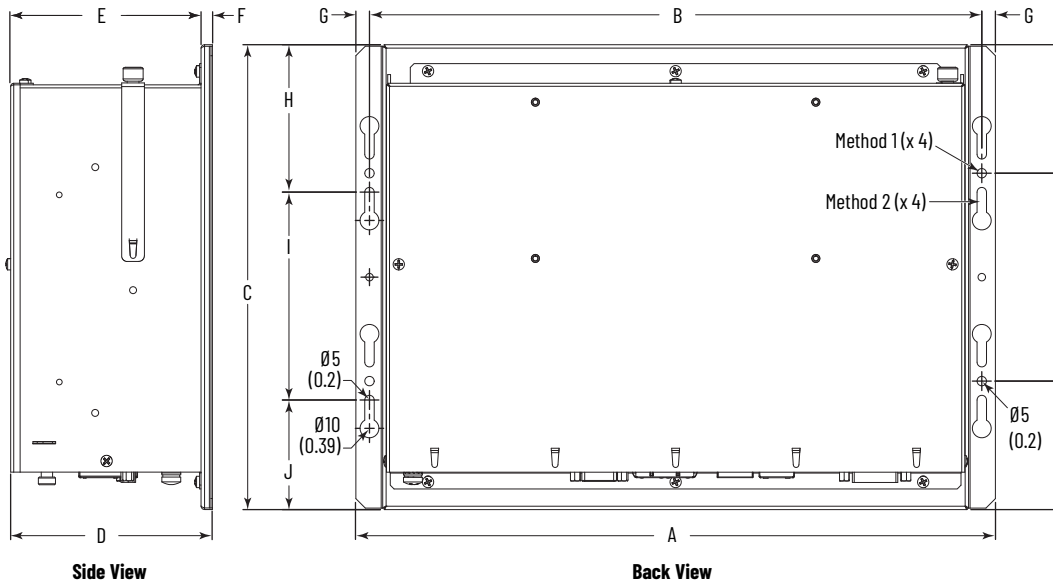


Required Tools and Hardware for Installation

The following tools and hardware are required to install the wall mount box PCs.

- A drill and 4.5 mm drill bit
- 2.5 mm Phillips screwdriver
- Four M4x20 stainless steel screws (customer supplied)
- Safety glasses

Figure 1 - Dimensions



Bull. No.	Dimensions in mm (in.)										
	A	B	C	D	E	F	G	H	I	J	K
6300B-PBCx	338.4 (13.32)	324 (12.75)	246 (9.69)	75.8 (2.98)	69.8 (2.75)	6 (0.24)	7.2 (0.28)	78 (3.07)	110 (4.33)	58 (2.28)	68 (2.68)
6300B-PBDx	377 (14.84)	362 (14.25)	232 (9.13)	128 (5.04)	122 (4.8)	6 (0.24)	7.5 (0.3)	51 (2)	150 (5.9)	31 (1.22)	41 (1.61)

Install the Wall Mount Box PC

There are two preferred methods to install the computer.

Install Method 1

1. See Method 1 in [Figure 1](#) to locate and drill holes for the four M4x20 stainless steel screws.
2. Align the holes on both computer brackets with the four drilled holes.
3. Install the computer with the four customer-supplied screws.
4. Tighten the four screws.

Install Method 2

1. See Method 2 in [Figure 1](#) to locate and drill holes for the four M4x20 stainless steel screws.
2. Install the four customer-supplied screws but leave enough space to hang the brackets.
3. Align the four keyhole slots on both computer brackets with the four installed screws.
4. Slide each bracket downward until all four screws are at the top of each keyhole slot.
5. Tighten the four screws.

Connect Peripheral Cables

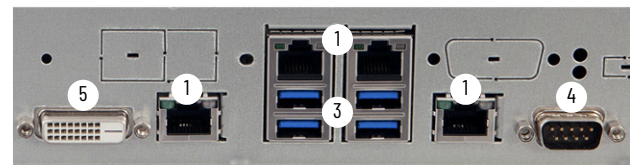
Connect peripheral cables to the appropriate I/O ports on the computer. To comply with EN 61326-1, use the following for cable types. All I/O cables must be used only indoors, and USB cables must be less than 3 m (9.84 ft) long.

Item No.	Cable Type	Required Attribute
1	LAN	Shielded
2	USB 2.0	
3	USB 3.0	
4	RS-232 DB9M	
5	DVI-D	

Item No.	Cable Type	Required Attribute
—	AC power ⁽¹⁾	Unshielded
—	DC power ⁽²⁾	



Peripheral connections on 6300B-PBCx box PCs



Peripheral connections on 6300B-PBDx box PCs

Grounding and Bonding

Whenever two connected pieces of equipment are far apart, it is possible that their ground connections could be at a different potential level.

To overcome possible grounding problems, the following bonding methods are recommended:

- Method 1: Connect the data cable screens to the equipotential bonding rail on both sides before connecting the cable to the interfaces.
- Method 2: Use an equipotential bonding cable (16 mm² or 6 AWG) to connect the grounds between this VersaView 6300B computer and a connected monitor.

DC Power Supply Guidelines

Follow these guidelines to select the DC power supply for the computer.

- The computer must be powered with a voltage of 24V DC (18...32V DC SELV input voltage range).
- The nominal output power must be 25% larger than the drained power.
- The output voltage rise time has to be less than 100 ms.
- Consider the working temperature and the thermal derating of the power supply.
- The inrush current cannot exceed a peak current of 10 A and a pulse width time of 400 μs.

Install the Ground Wire (for All Box PC Models)

1. Turn off the main power switch or breaker.
2. Remove the supplied nut, eyelet terminal, and washers from the ground screw.
3. For earth ground, fasten a 2.5 mm² (14 AWG) or larger external wire to the eyelet terminal.
Use a ground wire with an insulation color that is approved by local inspection authority.
4. Install the ground wire to the ground screw in the sequence shown at right.
5. Tighten the nut to the ground screw.



Sequence No.	Description	Sequence No.	Description
1	Toothed washer	4	Lock washer
2	Eyelet terminal	5	Nut
3	Washer		

Connect Power



ATTENTION: When you connect power to the computer for the first time, these actions occur:

- The default UEFI setting automatically starts the computer after it is plugged into a power source.
- For VersaView 6300B wall mount PCs with a Microsoft Windows® operating system (OS), you must read and accept an End User Setup procedure. Do not disconnect power from the system until after the Windows Setup procedure is completed. If power is disconnected during this procedure, it can result in a corrupted system image.

Operate the wall mount PC in an industrial or control room environment, which uses some form of power isolation from the public, low voltage mains.



ATTENTION: For VersaView 6300B wall mount box PCs with a Windows OS, perform the following:

- Supply the computer with its own disconnect. Use an uninterruptible power source (UPS) to help protect against unexpected power failure or power surges.
- Always shut down the Windows OS before you disconnect power to the computer to minimize performance degradation and operating system failures.

Connect DC Power (for 6300B-PBCx Box PCs)

All VersaView DC powered models require a safety extra low voltage (SELV)⁽¹⁾ power supply per UL. The power supply is internally protected against reverse polarity.

To minimize ground loop currents and noise, Allen-Bradley recommends that DC powered models use only one grounded connection. See [Install the DC Power Connector Assembly](#) for the ground connection on these models.

To connect the computer to a DC power source, perform the following steps.



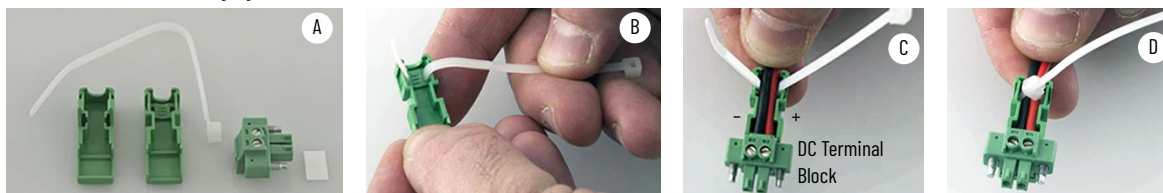
You need the following tools for this installation:

- Small screwdriver
- Wire stripper, cutter, and crimper tool
- Cutting pliers

Install the DC Power Connector Assembly

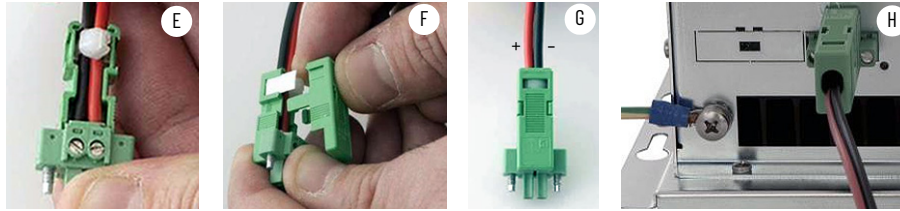
The DC power connector assembly is shipped with the computer but must be assembled. To assemble, wire, and install the DC power connector on the computer, perform the following steps.

1. Verify that the DC power wires meet these requirements:
 - Material: Stranded copper
 - Wire gauge: 1.5...4 mm² (16...12 AWG)
2. Open the power connector assembly kit that shipped with the computer (A).
3. Insert the cable tie through the slots of the appropriate connector clamp (B).
4. Slide the connector clamp with the attached tie on the end of the supplied DC terminal block (C).
5. Insert the DC terminal wires (red for + and black for -) into the supplied DC terminal block to match what is shown in (C).
Use external wires that are at least 1.5 mm² (16 AWG) gauge.
6. To secure the DC power wires to the DC terminal block, tighten and torque the terminal block screws between 0.22...0.25 N•m (1.95...2.21 lb•in).
7. Tighten the cable tie so it is snug against the terminal wires (D).



(1) Where SELV is as defined in IEC 61010-2-201.

8. Use cutting pliers to cut the excess cable tie (E).
9. Install the white label supplied with the kit (F).
10. Align and install the other connector clamp half to complete the assembly (G).
11. Install the assembled power connector to the computer (H).
To secure the power connector to the computer, tighten and torque the screws to 0.3 N•m (2.66 lb•in).
12. Turn on the main power switch or breaker.
13. See [Connect Power on page 4](#) for what happens during initial computer power-up.



Connect AC Power (for 6300B-PBDx Box PCs)

To connect the computer to an AC power source, perform the following steps.

1. Connect the appropriate end of the supplied 3-prong, IEC60320-C13 power cord to the power input port on the computer.
2. Connect the other end of the power cord to an AC power source with an input voltage of 100...230V AC, 50/60 Hz.
3. Turn on the power switch in the power input port of the computer.
4. See [Connect Power on page 4](#) for what happens during initial computer power-up.



AC Power Input Port

Additional Resources

This publication provides basic installation instructions. For more information, see the following Rockwell Automation publications at rok.auto/literature.

Resource	Description
VersaView 6300B Wall Mount Box PCs User Manual, publication 6300B-UM002	Provides details on how to install, configure, operate, and troubleshoot the VersaView 6300B wall mount box PCs.
VersaView 6300 Industrial Computer and Monitor Specifications Technical Data, publication IC-TD003	Provides technical specifications for VersaView 6300 industrial computers and monitors.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines to install a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
Knowledgebase	Access Knowledgebase articles.	rok.auto/knowledgebase
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

Documentation Feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

Battery Removal



This computer contains a sealed lithium battery that could need replacement during the life of the computer. For instructions to remove and replace the battery, refer to publication [6300B-UM002](#), VersaView 6300B Wall Mount Box PCs User Manual. At the end of its life, collect the battery contained in this computer separately from any unsorted municipal waste.

Waste Electrical and Electronic Equipment (WEEE)







At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

For technical support, visit rok.auto/support.

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