

Dell SBR68

Dell Precision 5820 MT Tower Workstation User Manual

Model: Precision 5820

INTRODUCTION

This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your Dell Precision 5820 MT Tower Workstation. The Dell Precision 5820 MT Tower is a high-performance workstation designed for demanding professional applications, featuring an Intel Core i9-10900X processor, 16GB DDR4 RAM, a 256GB SSD, and an AMD Radeon Pro WX3200 graphics card, running Windows 10 Pro.



Figure 1: Front view of the Dell Precision 5820 MT Tower Workstation.

COMPONENTS OVERVIEW

Familiarize yourself with the external components and ports of your workstation.



Figure 2: Front and rear view with numbered components and ports.

Front Panel Components:

1. Power Button
2. Optical Drive (8X DVD+/-RW Slimline)
3. USB 3.0 Ports
4. USB 2.0 Ports
5. Headphone Jack
6. Microphone Jack
7. SD Card Reader (if equipped)
8. Front Air Vent

Rear Panel Components:

16. Power Connector
17. Power Supply Unit (PSU)
18. USB 3.0 Ports
19. USB 2.0 Ports
20. Ethernet Port (RJ-45)
21. Audio Line-out Port
22. Audio Line-in Port

23. DisplayPort / HDMI (depending on graphics card)
24. Expansion Card Slots

SETUP INSTRUCTIONS

Follow these steps to set up your Dell Precision 5820 MT Tower Workstation.

1. **Unpack the Workstation:** Carefully remove the workstation and all accessories from the packaging. Ensure all components listed in the packing slip are present.
2. **Position the Workstation:** Place the tower on a stable, flat surface with adequate ventilation. Avoid blocking air vents.
3. **Connect Peripherals:**
 - Connect the Dell KB216 Wired Keyboard to an available USB port.
 - Connect the Dell MS116 Wired Mouse to an available USB port.
 - Connect your monitor(s) to the appropriate display ports on the AMD Radeon Pro WX3200 graphics card (e.g., mDP ports). Use adapters if necessary.
 - Connect any other peripherals such as external drives, printers, or network cables.
4. **Connect Power:** Plug the power cable into the power connector on the rear of the workstation, then plug the other end into a grounded electrical outlet or surge protector.
5. **Initial Power On:** Press the power button on the front panel. The system will boot up, and Windows 10 Pro will begin its initial setup process. Follow the on-screen instructions to complete the operating system configuration.

OPERATING INSTRUCTIONS

This section covers basic operation of your Dell Precision 5820 MT Tower.

Powering On and Off:

- **To Power On:** Press the power button on the front of the tower.
- **To Shut Down:** In Windows 10 Pro, click the *Start* button, then *Power*, and select *Shut down*. This ensures all applications are closed properly and data is saved.
- **To Restart:** In Windows 10 Pro, click the *Start* button, then *Power*, and select *Restart*.
- **To Sleep:** In Windows 10 Pro, click the *Start* button, then *Power*, and select *Sleep*.

Using the Optical Drive:

The 8X DVD+/-RW Slimline drive allows you to read and write CDs and DVDs.

- **To Open:** Press the eject button on the optical drive bezel.
- **To Insert:** Place a disc onto the tray with the label side up and gently push the tray back into the drive until it clicks.

Connecting to a Network:

- **Wired Connection:** Connect an Ethernet cable from your router or network switch to the Ethernet port on the rear of the workstation.
- **Wireless Connection:** The workstation includes an Intel Dual Band Wireless AC 8265 (802.11ac) module. In Windows 10 Pro, click the network icon in the taskbar, select your Wi-Fi network, and enter the password if

prompted.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your workstation.

- **Keep Vents Clear:** Ensure that the air vents on the front, rear, and sides of the tower are not obstructed to allow for proper airflow and prevent overheating.
- **Clean Regularly:** Use a soft, dry cloth to clean the exterior of the tower. For dust accumulation in vents, use compressed air. *Always power off and unplug the workstation before cleaning.*
- **Software Updates:** Regularly check for and install updates for Windows 10 Pro, device drivers (especially graphics drivers), and Dell system utilities to maintain security and performance.
- **Data Backup:** Periodically back up important data to an external drive or cloud storage to prevent data loss.



Figure 3: Exploded view showing internal components for maintenance and upgrades.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
Workstation does not power on.	No power, loose connections.	<ul style="list-style-type: none">• Ensure the power cable is securely connected to both the workstation and the electrical outlet.• Verify the power outlet is functional.• Check the power supply unit (PSU) switch if present.

Problem	Possible Cause	Solution
No display on monitor.	Incorrect cable connection, monitor off, incorrect input.	<ul style="list-style-type: none">• Ensure the monitor is powered on and connected to the graphics card ports (AMD Radeon Pro WX3200).• Verify the monitor's input source is set correctly.• Try a different display cable or monitor if available.
System is slow or unresponsive.	Too many applications, low disk space, outdated drivers.	<ul style="list-style-type: none">• Close unnecessary applications.• Check available disk space on the 256GB SSD.• Update Windows 10 Pro and graphics drivers.• Run a system diagnostic tool.
Peripheral (keyboard/mouse) not working.	Loose connection, driver issue.	<ul style="list-style-type: none">• Ensure the peripheral is securely plugged into a USB port.• Try a different USB port.• Restart the workstation.• Check Device Manager in Windows for driver issues.

SPECIFICATIONS

Detailed technical specifications for the Dell Precision 5820 MT Tower Workstation.

Processor	Intel Core i9-10900X (3.7GHz, 4.7GHz Turbo, 10 Cores, 19.25MB Cache, HT, 165W)
Memory	16GB (2x8GB) DDR4 2666MHz UDIMM Non-ECC Memory
Storage	2.5" 256GB SATA Class 20 Solid State Drive (SSD)
Graphics Card	AMD Radeon Pro WX 3200, 4GB GDDR5, 4 mDP (FWS)
Operating System	Windows 10 Pro, 64-bit, English
Wireless Connectivity	Intel Dual Band Wireless AC 8265 (802.11ac) 2x2 + Bluetooth module
Optical Drive	8X DVD+/-RW Slimline
Keyboard	Dell KB216 Wired Keyboard English Black
Mouse	Dell MS116 Wired Mouse Black
Power Supply	950W Chassis CL
Dimensions (Approx.)	27 x 23.6 x 12 inches (Package Dimensions)
Weight (Approx.)	42.4 pounds

WARRANTY AND SUPPORT

Your Dell Precision 5820 MT Tower Workstation comes with a 3-Year Hardware Warranty with Onsite/In-Home Service after Remote Diagnosis. For technical assistance, warranty claims, or further support, please refer to the official Dell support website or contact Dell customer service.

For the most up-to-date support information, drivers, and documentation, visit www.dell.com/support.