

Precision 3460 Small Form Factor

Key Features of the Dell Precision 3460 SFF

Precision 3460 Small Form Factor ⇒ **Compact Design:** The small form factor (SFF) design allows for a more compact desktop compared to traditional tower workstations, making it suitable for environments where space is limited.

Performance Options:

- **Processors:** It typically comes with Intel Core or Xeon processors, depending on the specific configuration. These processors are powerful enough to handle demanding applications, multitasking, and large datasets.
- **Graphics:** It may be equipped with professional-grade NVIDIA or AMD graphics cards, which are essential for tasks such as 3D modeling, CAD, and video rendering.

Memory & Storage:

- **RAM:** The Precision 3460 SFF can support up to 64GB or more of DDR4 memory, providing enough bandwidth for memory-intensive tasks.
- **Storage:** It includes various storage options like SSDs (Solid-State Drives) and HDDs (Hard Disk Drives), with the possibility for RAID configurations for enhanced performance and data redundancy.
- **Expandability:** Although it is a small form factor system, it still offers some expandability options, including PCI e slots for adding additional graphics cards, network cards, or other expansion cards.

Connectivity:

- It comes with a variety of ports including **USB 3.2, USB-C, Ethernet, HDMI, and DisplayPort**, which help in connecting peripherals like monitors, storage devices, and external networks.
- Optional wireless connectivity like Wi-Fi and Bluetooth.

Durability and Reliability:

- Like other Dell Precision workstations, the 3460 is built to be highly reliable, with options for ISV (Independent Software Vendor) certification for many professional applications.
- It is tested to meet military standards for durability.
- **Operating System:** Typically, the system comes pre-installed with Windows 10 Pro or Windows 11 Pro, with options for Linux-based operating systems in some configurations.
- **Security Features:** Dell Precision workstations often come with enterprise-level security features, including TPM 2.0 (Trusted Platform Module), smart card readers, and optional fingerprint readers.

Ideal Use Cases:

- **CAD and 3D modeling:** Professionals in architecture, engineering, and design can benefit from the workstation's high performance and graphics capabilities.
 - **Data analysis:** Users working with large datasets or conducting simulations will appreciate the system's memory and CPU power.
 - **Content creation:** Video editors and graphic designers will find the workstation's graphical performance and processing power suitable for demanding applications like Adobe Premiere, Autodesk, and others.
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Processor Options:

The **Precision 3460 SFF** supports Intel's 11th-generation Core processors, and potentially even newer depending on the exact model and configuration. This provides significant improvements in both multi-threaded and single-core performance, which is crucial for both professional software and general productivity tasks.

- **Intel Core i5, i7, and i9 processors:** These are high-performance processors suitable for most general and professional applications.
- **Intel Xeon processors:** For even more demanding professional use, including advanced simulations, virtual machines, and large-scale data analysis, Xeon processors are an excellent option. These processors support error-correcting code (ECC) memory, which enhances data integrity for mission-critical tasks.

2. Graphics Options:

The **Precision 3460** is built to handle demanding graphical applications, making it an ideal choice for professionals in creative and engineering fields. Here are some of the graphics options you can expect:

- **NVIDIA Quadro and RTX Series:** Professional-grade GPUs from NVIDIA, including Quadro T1000, T2000, or even higher-end RTX options (RTX A2000, A4000) for applications like AutoCAD, SolidWorks, and other 3D CAD, rendering, or scientific software.
- **AMD Radeon Pro:** Some configurations offer AMD Radeon Pro series GPUs, which are equally capable of handling tasks like video rendering and graphical modeling.
- **Intel Integrated Graphics:** For basic tasks or office productivity, Intel UHD or Iris Xe integrated graphics may be available, although these are not suitable for heavy graphical workloads.

3. Memory and Storage Configurations:

The **Dell Precision 3460** offers extensive memory and storage configurations to cater to various professional needs:

Memory:

- **Up to 64GB of DDR4 RAM**, typically in two or four slots (depending on the exact model). For high-end workloads, ECC memory support is also available, ensuring that critical data is free of corruption.
- You can opt for **16GB, 32GB, or 64GB configurations**, allowing you to scale your system's memory based on your performance requirements.

Storage:

- The SFF version typically supports **one M.2 PCIe NVMe SSD** for fast primary storage, with capacities ranging from 256GB to 2TB, ensuring that boot times and file access are extremely fast.
- Additional storage can come in the form of **secondary M.2 or 2.5-inch SATA SSD or HDDs**. It is also common to configure a **RAID 1 or RAID 0** for data redundancy or performance.

4. Connectivity and Ports:

The small form factor doesn't mean compromising on connectivity. **The Dell Precision 3460** comes equipped with a wide variety of ports and options for connectivity:

USB Ports:

- Multiple **USB 3.2 Gen 1 and Gen 2** ports, including Type-A and Type-C, for quick connection to external devices like storage drives, printers, or peripherals.
- **USB-C with Power Delivery (PD)** for fast charging and data transfer.

Display Outputs:

- The system can support multiple monitors via **DisplayPort 1.4, HDMI 2.0, and USB-C**, allowing you to set up a multi-display workspace.
- **Integrated Intel Iris Xe** or discrete GPUs offer robust support for higher resolution displays for advanced graphical work.

Networking:

- **Gigabit Ethernet** for wired network connectivity, ensuring fast, reliable internet access and file transfers.
- **Wi-Fi 6** (optional in some configurations) for better wireless networking, especially in environments with multiple users or heavy traffic.
- **Bluetooth 5.1** for wireless peripherals like headsets, mice, and keyboards.

Audio:

- High-quality audio ports for speakers and microphones, plus integrated **Realtek audio**.

5. Security Features:

For businesses and professionals, security is a top priority. The Precision 3460 comes with several key security features to help protect your work and data:

- **TPM 2.0:** The Trusted Platform Module is essential for secure encryption of sensitive data, including when paired with Windows BitLocker.
- **Smart Card Reader:** For physical security using smart cards in corporate environments.
- **Fingerprint Reader (optional):** For biometric security to prevent unauthorized access.
- **Smart USB Protection:** Allows for control over which devices can connect to the workstation, helping prevent data theft via USB ports.

6. Design and Build:

The small form factor of **the Precision 3460** makes it ideal for offices or spaces where desk real estate is limited. Despite its compact size, it maintains a professional and robust design:

- **Minimalist and functional** with easy access to internal components for upgrades and maintenance.
- Tool-less chassis for easy upgrades of **storage or memory**, without needing to open the system with screws or tools.
- **Quiet operation** due to advanced thermal management, which is important when using high-performance components.

7. ISV Certification:

- **Dell Precision workstations are ISV certified**, meaning they are tested and validated with industry-leading software providers. This ensures that professionals using tools like Autodesk AutoCAD, SolidWorks, Adobe Creative Cloud, and MATLAB will get the most reliable performance and stability.

8. Sustainability:

- **The Precision 3460** also places emphasis on environmental sustainability. Dell offers energy-efficient components, and the workstation is built with a focus on eco-friendly materials. It is Energy Star certified and can be configured with up to 25% post-consumer recycled materials in certain components.
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