

3Shape PC Catalog

Version 23.1

Valid February 23rd, 2023



Changes in this version of the PC catalog

Changes from 22.3 to 23.1 include:

- Revision of technical specifications for Desktop PC Models (Item #: 20000226, 20000227, 20000228)

Changes from 22.2 to 22.3 include:

- Removal of older Dell Precision Laptop (Item #: 20000213)

Changes from 22.1 to 22.2 include:

- Addition of new Laptop (Item #: 20000215)
- Support of TRIOS 5 scanner
- Addition of minimum and recommended hardware requirements for TRIOS 5 scanner

Changes from 21.4 to 22.1 include:

- Revision of HP Zbook technical specs (Item #: 20000214)
- General formatting updates
- Addition of Windows Server 2019 to the recommended DentalDesktop Server PC requirements

This document is subject to change without notice.

All removed and previously approved PC's can be found in the Legacy PC Catalog on the [Partner Portal](#).

Before reading the PC catalog please complete reading all six points as they contain vital information about PC selection

The purpose of the PC catalog is to inform resellers about which PCs can be used with different 3Shape products. It is not intended for use as end-user information.

1 **The importance of the PC**

The PC is an important part of the overall 3Shape system. It is the engine on which the software is run, and consequently the software puts some requirements on the PC. Selecting the correct PC will ensure a good user experience and effective workflow for the user. This document outlines how to determine which PC to use for a given 3Shape system or combination of systems. If a combination of 3Shape systems is used, make sure all systems installed on the PC, are updated to the latest version.

2 **Selecting a PC**

If the system includes TRIOS scanning, a PC from the “List of specific PCs” must be used in order to guarantee proper operation. PCs approved for TRIOS scanning will support the following scanners: TRIOS standard, TRIOS color, TRIOS 3, TRIOS 3 Wireless, and TRIOS 4, and TRIOS 5. 3Shape cannot guarantee proper operation of a TRIOS Scanner on PCs that are not listed in this PC list.

If the system does not include TRIOS scanning, it is also possible to select a PC that complies with the specifications listed in the section “Minimum PC requirements for 3Shape Software packages”.

3 **Ordering a PC**

For ordering information on the PCs delivered by 3Shape, locate the 3Shape item number under the PC name. Only resellers may order PCs directly from 3Shape. Not all PCs are available from 3Shape.

All PC’s, delivered by resellers, are subject to the local availability from the PC manufacturer. Not all models may be available from the PC manufacturer in all regions. Not all models may be available from each reseller.

4 **PC Configuration**

Some PCs allow for variation of specific parameters within some certain limits. In these cases, the variations allowed are denoted by the terms ‘or’/ ‘or more’.

The specific PC configuration available from 3Shape will depend on the availability from the PC manufacturers at the date of order. 3Shape will, upon request, inform of the specific PC configuration as delivered by 3Shape.

5 **Service and Support on PCs**

All end-user service and support on PCs, delivered by 3Shape, are provided by the PC manufacturer, not 3Shape. Please check at the local PC manufacturer for detailed information about service and support terms. 3Shape will provide a 3-year support service only for TRIOS laptops, delivered by 3Shape after August 15th, 2021.

6 **Windows edition**

3Shape develops and test the systems for Windows Pro version as this contains several benefits over the Home version. The Pro version will enable the PC to be part of a corporate domain, whereas the Home version will not. For Windows 10, only the Pro version will allow full control of Windows updates. For full information please refer to the ‘PC setup guide for TRIOS’ document. 3Shape products will in general also work on Windows Home edition, but only the Windows Pro version is tested on a regular basis, why 3Shape clearly recommends Windows Pro. Important note: TRIOS3 Wireless scanner requires Windows 10 or Windows 11.

PCs available from 3Shape

This covers PCs available from 3Shape and/or s 3Shape reseller. This list covers PCs for the TRIOS® scanner (POD Solution).



Sales Item: 20000215 - Dell Precision with Touchscreen with 3 Year Support

Dell Precision Workstation 15 (7670)




Display: 16-inch, UHD+ 3840 x 2400 Touch
 Processor: 12th Gen Intel® Core™ i5-12600HX vPro®
 Memory: 32GB DDR5
 Disk: 1TB SSD
 Graphics card: NVIDIA RTX A3000 w/12 GB GDDR6
 Keyboard: Regional, depending on availability
 Operating system: Windows 11 Pro
 Camera: HD camera with built-in microphone and speakers
 Dim: 14.1" x 9.5" x .98"-1.08"; 360mm x 242mm x 25-27.36mm
 Weight: 2.49 kg (5.5 lbs)

	3Shape Hardware and Software						May be delivered by	
	TRIOS 5 POD Solution	TRIOS 3 & 4 POD Solution	TRIOS Design Studio	Ortho System	Implant Studio ⁽⁷⁾	Dental System	3Shape	3Shape reseller
<p>Sales Item: 20000215 - Dell Precision with Touchscreen with 3 Year Support</p> <p>Dell Precision Workstation 15 (7670) Display: 16-inch, UHD+ 3840 x 2400 Touch Processor: 12th Gen Intel® Core™ i5-12600HX vPro® Memory: 32GB DDR5 Disk: 1TB SSD Graphics card: NVIDIA RTX A3000 w/12 GB GDDR6 Keyboard: Regional, depending on availability Operating system: Windows 11 Pro Camera: HD camera with built-in microphone and speakers Dim: 14.1" x 9.5" x .98"-1.08"; 360mm x 242mm x 25-27.36mm Weight: 2.49 kg (5.5 lbs)</p>	✓	✓ ⁽¹⁾	✓	✓ ⁽²⁾	✓	(✓) ^(2,3)	✓	✓
<p>Sales Item: 20000214 - HP Zbook with 3 Year Support</p> <p>HP ZBook 15 (G7 or G8) Display: 15.6 inch FHD (1920x1080) Processor: Intel® Core™ i7-10850H (or more) Memory: 16 GB DDR4 3200 Disk: 256GB SSD Graphics card: NVIDIA® Quadro T1000 (or more) Keyboard: Regional, depending on availability Operating system: Windows 10 Pro Camera: no webcam with built-in microphone Dim.: 14.15" x 9.21" x 0.9"; 359.4mm x 233.9mm x 22.8mm Weight: 1.9 Kg (4.2 lbs.)</p>	(✗) ⁽⁹⁾	✓	✓ ⁽⁸⁾	✓ ⁽⁸⁾	(✓) ⁽⁸⁾	(✓) ^(2,3)	✓	✓



PCs available from 3Shape

This covers PCs available from 3Shape and/or 3Shape reseller. This list covers PCs for the LAB[®] scanners and the Ultra PC Approved for TRIOS use with Pod configurations.

		3Shape Hardware and Software						May be delivered by	
		TRIOS 5 POD solution	TRIOS 3 & 4 POD Solution	TRIOS Design Studio	Ortho System	Implant Studio ⁽⁷⁾	Dental System	3Shape	3Shape reseller
	<p>Lenovo Thinkstation P360 Ultra 3Shape item no for TRIOS Pod: 20000128 3Shape item no for LAB: 20000127 3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.) Processor: Intel i5-12500 Memory: 64GB RAM Disk: 1TB M.2 2280 PCIe[®] SSD Graphics Card: NVIDIA RTX A2000 6GB Operating system: Windows 11 Pro Keyboard: Regional, depending on availability Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9") Mouse: included</p>	✓	✓ ⁽¹⁾	✓	✓ ⁽⁵⁾	✓	✓ ⁽⁵⁾	✓	✓
	<p>Lenovo ThinkStation P360 Tiny - High Performance PC 3Shape item no: 20000126 3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.) Processor: Intel i5-12400T Memory: 32 GB RAM Disk: 1TB NVMe M.2 SSD Graphics Card: NVIDIA T1000 8GB Operating system: Windows 10 Pro Keyboard: Regional, depending on availability Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9") Mouse: included</p>	✗	✗	✓	✓ ⁽⁵⁾	✓	✓ ⁽⁵⁾	✓	✓
	<p>Lenovo ThinkCentre M70t - Standard PC 3Shape item no: 20000125 3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.) Processor: Intel i5-10400 Memory: 16GB RAM Disk: 512GB NVMe M.2 SSD Graphics card: NVIDIA Quadro P620 2GB Operating system: Windows 10 Pro Keyboard: Regional, depending on availability Dim.: 145mm (5.7") x 296 mm (11.7") x 346mm (13.6") Mouse: included</p>	✗	✗	✗	✓ ⁽⁶⁾	✗	✓ ⁽⁶⁾	✓	✓

Notes

- 1 TRIOS 3 Wireless scanners require at least Windows 10 OS.
- 2 Software (Studio/Clinic Apps or Dental System) will not be installed from factory. Reseller must install the software.
- 3 PC is approved for Dental System design station only. For Dental System scanning, we recommend stationary computers (P340/M720), but all laptop models can also be used.
- 4 In order to run 3Shape products on Apple computers, Windows need to be installed which therefore requires more setup for the reseller (requires Bootcamp, see instructions on Apple's website).
- 5 This PC is sold together with E3, E4, and D/R 2000. Note that PCs for all refurbished models are subject to change and may not be the same as for new units.
- 6 This PC is sold together with E1 and E2. Note that PCs for all refurbished models are subject to change and may not be the same as for new units.
- 7 Please refer to the recommendation for Implant Studio when looking for specific PC.
- 8 Only recommended for use as a client in Client Server setup.
- 9 HP ZBook 15 (G7 or G8) can't be sold and used together with a TRIOS 5 scanner

All systems including a TRIOS must be delivered to end users with a configured PC

3Shape provides fully functional computer with TRIOS software installed. Alternatively, Reseller purchases, configures and delivers fully functional computer with TRIOS software installed. Please note! Distributor may be required to exchange some parts (e.g. RAM, disk, etc.), depending on the available configurations by the computer supplier. All specifications are subject to change without notice.

PC setup guide

The user experience (especially when using TRIOS) depends to a very large degree on the proper configuration of the PC used. To ensure proper setup of the PCs, 3Shape provides a document intended for distributors of TRIOS®. It describes all steps required to set up a new PC to enable fast and accurate scans with the TRIOS POD systems (cart systems are delivered fully configured). The document may be found on the 3Shape support site. The document is subject to change.

TRIOS 5 PC Requirements (self-sourced only)

If the system includes TRIOS scanning, a PC from the “List of specific PCs” must be used in order to guarantee proper operation. From August 15, 2021 laptops have been included in a bundle with the TRIOS Pod configuration for EU+ and North America markets. For the rest of the markets the purchase of the PC delivered by 3Shape is optional. Such PCs are not covered by the 3Shape PC Support Program either.

The specifications below are valid only when operating a TRIOS 5 scanner in the markets where the purchase of the laptop is not compulsory or possible. For other scenarios, please always refer to the PCs available from 3Shape.

TRIOS 5 Laptop

TRIOS 5 Laptop	Laptop Minimum:	Laptop Recommended:
Processor:	Intel® Core™ i5-12400 or similar	Intel® Core™ i5-12600HX or better
Memory:	32 GB	32 GB
Disk:	512 GB SSD (or more)	1 TB SSD
Graphics card:	NVIDIA® T1000	NVIDIA® A3000 or better
Operating system:	Windows 10 Pro or higher	Windows 10 Pro or higher
Optional:	Touch screen	Touch screen

TRIOS 5 Desktop

TRIOS 5 Desktop PC	Desktop Minimum:	Desktop Recommended:
Processor:	Intel® Core™ i5-12400 or similar	Intel® Core™ i5-12500 or better
Memory:	32 GB	64 GB
Disk:	512 GB SSD (or more)	1 TB SSD (or more)
Graphics card:	NVIDIA® T1000	NVIDIA® A2000 or better
Operating system:	Windows 10 Pro or higher	Windows 10 Pro or higher
Optional:	Touch screen	Touch screen

Clinic Software PC Requirements (self-sourced)

This covers requirements for PCs not purchased through 3Shape.

The specifications below are not valid for operating a TRIOS scanner, please refer to the PCs available from 3Shape.

Studio App PC

TRIOS Design Studio, Implant Studio, Splint Studio, Excitement Apps

Desktop Recommended

Resolution:	Full HD (1920 x 1080)
Processor:	Intel® Core™ i7 8 th Generation or AMD Ryzen™ 7 2700 or better
Memory:	32 GB
Disk:	1 TB SSD (or more)
Graphics card:	NVIDIA® GTX 1060 6 GB or better
Operating system:	Windows 10 Pro or higher
Optional:	Touch screen 3DConnexion Space Mouse Pro



Studio App PC

Desktop Minimum

Resolution:	Full HD (1920 x 1080)
Processor:	Intel® Core™ i5-8400 / AMD Ryzen™ 5 2600 or better
Memory:	16 GB
Disk:	512 GB SSD (or more)
Graphics card:	NVIDIA® GTX 1050 4GB or better
Operating system:	Windows 10 Pro
Optional:	Touch screen 3DConnexion Space Mouse Pro

Laptop Recommended

Resolution:	Full HD (1920 x 1080) with touch
Processor:	Intel® Core™ i7 8 th Generation / AMD Ryzen™ 7 3750H or better
Memory:	32 GB
Disk:	1 TB SSD
Graphics card:	NVIDIA® GTX 1050 4 GB or better
Operating system:	Windows 10 Pro or higher



Studio App PC

Unite Server PC

Recommended

Processor:	Intel® Core™ or Xeon™ / AMD Ryzen™ or Epyc™ 8 Cores at 2.1 Ghz or more
Memory:	16 GB or more
Diskspace:	1 TB SSD or more
Operating system:	Windows 11 Pro, Windows Server 2016 or Windows Server 2019
SQL Server:	Microsoft SQL 2021 Express SP1 (default)
Network:	Network Internet connection 1 GB/s



Unite Server PC

Minimum⁽¹⁾

Processor:	Intel® Core™ or Xeon™ / AMD Ryzen™ or Epyc™ 4 Cores at 2.1 Ghz or more
Memory:	16 GB
Diskspace:	1 TB SSD or more
Operating system:	Windows 10 Pro, Windows Server 2016 or Windows Server 2019
Network:	Network Internet connection 1 GB/s


- 1 The minimum PC requirements for Unite Server are for a setup with no more than 10 clients, and where the server will not be used as an active workstation. Please see "Network speed requirements" for requirements to network bandwidth and connection for the server PC. If the Unite Server PC will be used for TRIOS scanning, the PC needs to be selected from the List of approved PC's. If the Unite Server PC will be used as a workstation for Implant- or Design Studio, the PC needs to fulfill the minimum PC requirements for the selected 3Shape product. For more information on client-server setup please refer to the TRIOS Info Pack: Client-Server setup.
- 2 If you plan to connect to your own (existing) database instead of installing the included SQL Express Server, please check requirements for instance and database settings in the Unite SQL Server Guide.

Lab PC requirements (self-sourced)

This covers requirements for PCs not purchased through the 3Shape catalogue.

Legend

- ✓ Sufficient
- ✓+ Recommended for improved performance (optional)
- ✗ Not sufficient

		Ortho System 	Implant Studio 	Dental System ⁽³⁾ 
Processor	Intel Core i5	✓	✓ ⁽⁷⁾	✓
	Intel Core i7 or equivalent	✓+	✓+	✓+
Memory (RAM)	8GB	✓	✗	✓ ⁽¹⁾
	16GB	✓+	✓	✓ ⁽¹⁾
	32 GB	✓+	✓+	✓+ ⁽¹⁾
Disk	250GB (conventional or SSD)	✓	✗	✓ ⁽²⁾
	500GB (conventional or SSD)	✓+	✓	✓+ ⁽²⁾
	1TB (conventional or SSD)	✓+ ⁽²⁾	✓+	✓+ ⁽²⁾
Graphics card⁽⁶⁾	2GB NVIDIA GeForce	✓	✓	✓ ^(3,5)
	4GB NVIDIA GeForce	✓	✓+	✓+ ^(3,5)
	6GB NVIDIA GeForce	✓	✓+	✓+ ^(3,5)
	2GB NVIDIA Quadro	✓	✗	✓ ^(3,5)
	4GB NVIDIA Quadro	✓	✓	✓+ ^(3,5)
	6GB NVIDIA Quadro	✓	✓	✓+ ^(3,5)
Operating system	Recommended Windows 10 PRO (64bit) or higher	✓+	✓+	✓+
	Supported Windows 11 (64bit) Windows 10 Home (64bit) Windows 8.1 PRO (64bit) Windows 8.1 Home (64bit) Windows Server 2019	✓	✓	✓
	Supported Windows Server 2012 Windows Server 2016	✗	✗	✗
Monitor resolution	Recommended 1920x1080 (Full HD)	✓+	✓	✓
	1920x1200	✓	✓+	✓
Mouse	With wheel button	✓ ⁽⁴⁾	✓ ⁽⁴⁾	✓ ⁽⁴⁾

Notes

- 1 For simultaneous scanning and modeling of large cases, 32GB RAM is recommended.
 - 2 1TB recommended if used as a stand-alone system or a server with the order folder.
 - 3 Specs listed applies to Dental System design station only.
- Please check the serial number of older Scanner types before ordering PC. PCs do not support D250, D500, D640s and D700 with serial numbers starting with CXXXXXXX and D710 starting with DXXXXXXX. All D8XX, D9XX, D1000, D2000, E scanners and D7XX scanners with serial numbers HXXXXXXX and IXXXXXXX are compatible with the PCs.
- The 3Shape desktop scanner has to be connected to a USB 2.0 port and it should be the only device in the USB host controller unless otherwise recommended by 3Shape for specific PCs. It is recommended to connect keyboard, mouse, dongle and other peripherals to free USB 3.0 port when available 3Shape lab scanners do not work on shared USB connections.
- 4 3DConnexion Space Mouse Pro recommended for improved performance.
 - 5 For optimal scanning performance using desktop scanners - Compute capability version greater than 5.0 is needed.
 - 6 Only Nvidia Geforce and Quadro are currently supported for Dental System.
 - 7 To run Implant Studio, you can also use an approved PC with processor Intel Core i5 (12xxx generation).

Network speed requirements

The speed of the Ethernet is important as it will impact the user experience.
The faster network, the smoother user experience.

The faster connection the faster sending and receive of an order.
A typical TRIOS® order of 30Mb will take approx. 30 seconds to transmit on a 10Mbit/s line.

Legend		TRIOS	Ortho System	Implant Studio	Design Studio (Design on separate PC)	Dental System	Unite Server
✓ Sufficient ✓+ Recommended for improved performance (optional) ✗ Not sufficient							
Internet upload ⁽¹⁾ (Case communication with external partners and online services)	Minimum 5 Mbit/s	✓	✓	✓	✓	✓	✓
	Recommended 25 Mbit/s or faster	✓+	✓+	✓+	✓+	✓+	✓+
Internet download ⁽¹⁾ (Case communication with external partners and online services)	Minimum 5 Mbit/s	✓	✓	✓	✓	✓	✓
	Recommended 25 Mbit/s or faster	✓+	✓+	✓+	✓+	✓+	✓+
Internal network - wired (Wired ethernet, Communication in-house between client and server)	Recommended 1000BASE-T (1 Gbit/s)	✓+	✓+	✓+	✓+	✓+	✓+
Internal network - wireless (Wi-Fi, Communication in-house between client and server)	Recommended 5Ghz 802.11AC (100-300Mbit/s)	✓ (2,3)	✓ (2)	✓ (2,3)	✓ (2,3)	✓ (3)	✗ (All units in a client server setup must be wired)

- 1 The effective internet upload and download speed may be tested using free tools available on the internet, e.g. www.speedtest.net
- 2 The minimum effective upload and download speed between wireless client and Unite Server: **50 Mbit/s** (effective speed)
- 3 Wired network connection recommended for dedicated design stations for TRIOS Design Studio, Implant Studio and Dental System.