

# Ultimate performance and security in a 2U Form factor.

# **PRECISION 7920 RACK**





### Powerful performance

Power through the most complex, demanding applications more quickly with a new generation of dual-socket performance with the Intel® Xeon® processor Scalable family featuring up to 28 cores per processor. System memory is expandable up to 3TB of faster 2666MHz with select processors (future availability). In addition, every Dell Precision comes with the exclusive Dell Precision Optimizer, which automatically tunes your workstation to run some of the most popular (ISV) applications at the fastest speeds possible.



## Latest technology

Ready for complex projects, including virtual reality workflows, with next generation AMD Radeon Pro™ and NVIDIA Quadro® professional graphics with support for up to 900W of graphics power. No project is too big with up to 48TB of total storage featuring Enterprise class SAS hard drives and Dell Precision Ultra-Speed drives with up to 8 M.2 PCIe NVMe SSDs.



## Innovative design

Ideal for secure remote users (1:1) the new industrial 2U design fits seamlessly into your datacenter and delivers the same power and scalability as our highest-performing tower workstation. The Integrated Dell Remote Access Controller (iDRAC) allows you to deploy, update, monitor and maintain remote workstations with ease.



## **Outstanding reliability**

Precision Workstations are tested (Independent Software Vendor certified) to ensure the high-performance applications you rely on every day run smoothly. Maintain high-availability with dual redundant and removable power supplies.

# Features & Technical Specifications

**Feature Precision 7920 Rack Technical Specifications** 

One or two Intel® Xeon® processor Scalable family CPUs with up to 28 cores per processor and Intel **Processor Options** 

Advanced Vector Extensions, Intel Trusted Execution Technology, Intel AES New instructions, Optimized

Intel Turbo Boost and optional Intel vPro™ technology

Windows 10 Pro for Workstations (up to 4 Cores) Windows 10 Pro for Workstations (4 Cores Plus)

Windows 10 Pro for Workstations Downgrade to Windows 7 (up to 4 Cores) Windows 10 Pro for Workstations Downgrade to Windows 7 (4 Cores Plus)

Operating System **Options** Red Hat<sup>®</sup> Enterprise Linux<sup>®</sup> 7.3

Ubuntu Linux 16.04

Suse Linux (SLES 12 SP2) supported NeoKylin 6.0 SP3 (China only)

Chipset Intel® C621 (Lewisburg)

Six channel memory up to 1.5TB 2666MHz DDR4 ECC memory with dual CPUs, up to 3TB with select

CPU SKUs (future availability)

Memory Options<sup>1</sup> 24 DIMM Slots (12 DIMMs per CPU). Note: memory speed is dependent on specific Intel Xeon Processor

Scalable processor installed

Support for 3 PCI Express® x16 Gen 3 graphics cards1 - up to 900W with 3 x 300W double width

graphics cards (dual CPU configuration)

1600W PSU recommended for maximum configurations and some restrictions apply

High end 3D cards: Radeon™ Pro WX 9100

Radeon™ Pro SSG (future) NVIDIA Quadro GP100 NVIDIA Quadro P6000 **NVIDIA Quadro P5000** 

Mid-range 3D cards:

Radeon™ Pro WX 7100 **Graphics Options** 

Radeon™ Pro WX 5100 **NVIDIA Quadro P4000 NVIDIA Quadro P2000** 

Entry 3D cards: **NVIDIA Quadro P600** NVIDIA Quadro P400

Integrated VGA graphics motherboard connector (part of iDRAC9 Systems Management and requires

iDRAC9 Enterprise license to enable)

Professional 2D cards:

**NVIDIA NVS 310** 

Support for up to (8) 2.5" or 3.5" SATA/SAS drives, Up to 8 x M.2 NVMe PCIe SSDs via 2 x Dell Ultra-Speed Drive Quad x16 cards (maximum requires dual CPUs), NVMe RAID 0,1,10 option on 1st card (Intel RSTe vROC).

PERC PCIe controllers required for SAS drive support

M.2 NVMe PCIe SSDs

Up to 8\* x 1TB drives on 2 Dell Precision Ultra-Speed Drive Quad x16 cards. \*Requires dual CPU

confia.

2.5" SATA SSD Up to 8 x 1TB

2.5" SAS SSD Storage Options<sup>2</sup>

> Up to 8 x 800GB 2.5" SATA 7200 RPM

Up to 8 x 2TB

3.5" SATA 7200 RPM Up to 8x 8TB (future) 2.5" SAS 10K RPM 12Gb/s

Up to 8 x 1.8TB

2.5" SAS 15K RPM 12Gb/s

Up to 8 x 600GB

Integrated: 2 x Intel chipset AHCI 6Gb/s SATA controllers with 4 ports (total 8) each for HDD/SSD. One port for optical drive

Intel RSTe software RAID 0, 1,5,10 supported across 4 SATA ports on 1st controller only. (Maximum 4 drives in RAIDset)

Intel RSTe (vROC) software RAID 0,1,10 option (motherboard activation key) for M.2 NVMe PCIe SSDs on 1st Dell Ultra-Speed Drive Quad x16

or Duo x8 card (0,1). Customer kit available for Intel RSTe (vROC) motherboard activation key for NVMe RAID support.

# Storage Controller

**Optional:** PERC H330 12Gb/s SAS (6Gb/s SATA) 8 port PCIe controller supports JBOD and software RAID 0.1.5.10

PERC H730P PCI-e SAS 12Gb/s (SATA 6Gb/s) Hardware RAID PCIe controller with 1GB cache (Super Cap backup, RAID 0/1/5/10 (no JBOD)

PERC H740P PCI-e SAS 12Gb/s (SATA 6Gb/s) Hardware RAID PCIe controller with 4GB cache (Super Cap backup), RAID 0/1/5/10 (no JBOD)

Note: Windows 7 is not supported on the PERC H740P controller. PERC controllers are installed in Slot 3

Base: Intel® i350-Quad port 1Gb Ethernet Network Daughter Card (4 x 1Gb ports),

**Optional:** Intel® X550-Dual port 10Gb + Intel I350 Dual port 1Gb Ethernet Network Daughter card (2 x 10Gb + 2 x 1Gb ports )

#### **Network Daughter Cards**

Intel® X710\* Dual port 10Gb DA/SFP+, + I350 Dual port 1Gb Ethernet Network Daughter card Integrated: Integrated Broadcom® BCM54210 Ethernet LAN 10/100/1000 for iDRAC9 controller use with System Management tool suite

# 1:1 Remote Workstation Access Solutions

Optional: Teradici Dual and Quad display PCoIP™ PCIe remote access host cards

Wyse 5030/7030 PCoIP Zero clients. Teradici PCoIP software clients for Windows, Mac, IOS, Android and ChromeOS available from Teradici

# Manageability<sup>3</sup>

Dell OpenManage™ portfolio options that include Dell's exclusive Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller – includes one VGA graphics connection, Intel® vPro™ Technology's advanced management features (optional, requires Intel WiFi® Link WLAN)

**Optional:** Dell Precision Ultra-Speed Drive Duo (HH/HL,x8 card) and Ultra-Speed Drive Quad (FH/FL,x16 card) with active cooling. Support for up to 2 and 4 M.2 NVMe PCIe SSDs respectively. USB 3.1 (Gen 2) 10Gb/s Type C card (2 ports) 1 DP pass-through port

Add-in cards

Optional: Dual & quad (FH card) display Teradici PCoIP PCIe remote

workstation access cards. Full height and low profile bracket versions of dual display card available. Serial Port PCIe Card (single port)

#### Front

1 - USB 2.0

1 – USB 2.0 Management port (IDRAC9)

1 - VGA Port for iDRAC9

### Internal

1 – USB 3.1 Type A – supports standard USB storage key

SD Vflash media connector

#### Rear

2 – USB 3.1 Type A 4 – RJ45 Network

1 - Serial

1 – RJ45 for iDRAC 1 – VGA Port for iDRAC

**HxWxD:** 3.41" x 17.0" x 28.37" (29.78" with bezel); 86.8mm x 482mm x 715.5mm (751.3mm with bezel) Bays: (1) external slimline optical bay; (8) front accessible 3.5" bays (support total of (8) 3.5" or 2.5" HDD/SSD drives)

**Slots:** All slots PCIe Gen 3. (6) PCIe full height/full length slots, (1) PCIe full height/half length slot, (1) PCIe low profile/full length slot

#### Chassis

I/O Ports

Up to (3) double width x16 cards supported. All slots x16 mechanically.

• With single CPU – (1) x x16, (1) x x8, (1) x x8 half length, (1) x x8 low profile PCle slots

• With dual CPUs (2) x x16, (2) x x8 PCIe slots

**Power Supply:** One or two redundant hot pluggable 1100W –90% efficient (80PLUS Gold Certified), Available 1600W PSU is required for certain configurations

#### Storage devices

Slimline options: DVD-ROM; DVD+/-RW BD-RE

Security Options (Check regional availability)

Trusted Platform Module (TPM 1.2 or TPM 2.0); chassis Intrusion switch; Setup/BIOS Password; I/O Interface Security; lockable front bezel, Dell Data Guardian, Dell Endpoint Security Suite Enterprise

Regulatory and Environmental

For a complete listing of declarations & certifications, see Dell's regulatory & compliance homepage at dell.com/regulatory\_compliance

Warranty & Support Services<sup>4</sup>

3-Year Limited Hardware Warranty and 3-year NBD On-Site Service after Remote Diagnosis Optional: Dell ProSupport is designed to rapidly respond to your business's needs, help protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT environment

TAA

YES (check regional availability)





#### ISV certification applies to select configurations:

- <sup>1</sup> GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
- <sup>3</sup> Computrace is not a Dell offer. Certain conditions apply. For full details, see terms and conditions at www.absolute.com/en/about/legal/agreements.
- <sup>4</sup> Systems Management Options:Intel® vPro Technology Fully vPro-capable at point of purchase; the vPro systems management option requires vPro processors. Includes support for Intel Advanced Management Technology (AMT) 9.x. Intel® Standard Manageability Fully enabled at point of purchase, the Intel Standard Management option is a subset of the AMT features. ISM is not upgradeable to vPro technology post-purchase. No Out-of-Band Systems Management This option entirely removes Intel out of band systems (OOB) management features. The system can still support in band management. OOB management support through AMT cannot be upgraded post-purchase.
- <sup>5</sup> Availability and terms of Dell Services vary by region. For more information, visit Dell.com/servicecontracts/global; Limited Hardware Warranty available by writing Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see www.dell.com/warranty; Onsite Service after Remote Diagnosis: Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty (www.dell.com/warranty) and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.

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# **Essential Accessories**

# PRECISION 7920 RACK



Dell Wyse 5030



Dell Wireless Premium Keyboard & Mouse Combo | KM717



Dell UltraSharp 27 InfinityEdge Monitor with ARM | U2717DA



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