



## Dell Precision Rack 7000 Series (7910)

Ultimate performance and security in a 2U Form factor

### Why a rack? Because your work demands it.

When the job calls for more security and flexibility in remote or virtualized workstation environments, the Dell Precision Rack 7910 delivers.

- If security is top priority, you need more than a lock and key. Safely house your intellectual property in the datacenter
- Inhospitable or hazardous environment? Need a quiet, cool workspace? Provide employees with workstation-class performance remotely so they can stay productive no matter where they work

### Flexible deployment for 1:1 or virtualized 1: many environments – with ISV Certifications

- Deploy 1:1 with optional Dell Wyse 5030/7030 PCoIP Zero Clients for remote connectivity to provide a superb, responsive workstation experience
- For virtualized VMware ESXi and Citrix environments, extend productivity and security benefits to multiple users via 1-4 users with GPU passthrough
- For even greater scalability, deploy Nvidia's Grid technology for one-to-many (shared graphics) virtualized workstation users running true OpenGL 4.X/DX11 based applications

### Peak performance and smart design

Experience the same power and scalability as our highest-performing tower workstation, with the convenience of a slim 2U design.

- Take on the toughest most complex applications/workloads including workstation virtualization environments with 1 or 2 Intel® Xeon® Processors (E5-2600 v4) with up to 44 total cores
- Easily manage huge data sets with up to 1TB<sup>1,2</sup> of 2400MHz DDR4 quad-channel ECC memory
- Powerful in and out-of band systems management with Dell OpenManage™ portfolio featuring Dell Integrated Remote and Lifecycle Access Controller
- New professional grade AMD FirePro™ or NVIDIA® Quadro® graphics plus NVIDIA Grid option

### Seamlessly run your software applications

- Dell Precision Optimizer 3.5 auto-tunes application settings for up to 121% application performance improvement
- The result of hundreds of engineering hours and rigorous testing, Independent Software Vendor (ISV) Certifications offer peace of mind that your professional software applications run as designed

Feature		Precision Rack 7000 Series (7910) Technical Specification			
Processor Options	One or two Intel® Xeon® processor E5-2600 v4 Series with up to 22 cores per CPU and Intel Advanced Vector Extensions, Intel Trusted Execution Technology, Intel AES New instructions, Optimized Intel Turbo Boost and optional Intel vPro™ technology				
Operating System Options	Windows® 10 Professional (64 bit) Windows® 8.1 Professional (64-Bit) Windows® 7 Professional (64-Bit)	Red Hat® Enterprise Linux® 7.0 and 7.2 (required for Xeon E5-2600 v4 CPUs RHEL 6.5 supported, future 6.8 for E5-2600 v4)	VMware ESXi 5.5 U2 VMware ESXi 6.0 Citrix XenServer 6.5		
Chipset	Intel® C612				
Memory Options	Quad channel memory up to 1TB 2400MHz DDR4 ECC memory with dual CPUs, 24 DIMM Slots (12 DIMMs per CPU). Note: memory speed is dependent on specific Intel Xeon E5-2600 v4 Series processor installed				
Graphics <sup>4</sup> Options	Support for up to 4 PCI Express® x16 Gen 2/Gen 3 graphics cards (2 in x16 slots, 2 in x16/8 slots – requires dual CPUs) Up to 600W graphics (total up to 4 x 150W single width or up to 2 x 300W double width graphics cards)				
	<b>High end 3D cards:</b> AMD FirePro W9100 NVIDIA Quadro M6000 NVIDIA Quadro K6000 NVIDIA Quadro M5000 NVIDIA Grid K2a	<b>Mid-range 3D cards:</b> AMD FirePro W5100 NVIDIA Quadro M4000 NVIDIA Quadro K2200 NVIDIA Quadro M2000	<b>Entry 3D cards:</b> NVIDIA Quadro K620 Integrated VGA graphics motherboard connector (part of iDRAC8 Systems Management and requires iDRAC8 Enterprise license to enable)	<b>Professional 2D cards:</b> NVIDIA NVS 510 NVIDIA NVS 310	
Storage Options	Support for up to (4) M.2 PCIe SSDs and up to (8) 2.5" SATA/SAS drives . Optional miniPERC PCIe controllers required for SAS				
	<b>M.2 PCIe SSD (NVMe)</b> Up to (4) 1TB drives on Dell Precision Ultra-Speed Drive Quad. <b>PCIe SSD HH/HL card</b> Up to (2) Intel 1.2TB PCIe SSD NVMe drives	<b>2.5" SATA SSD</b> Up to (8) 1TB drives <b>2.5" SAS SSD</b> Up to (8) 400GB drives	<b>2.5" SATA SSD</b> Up to (8) 1TB drives	<b>2.5" SATA 7200 RPM</b> Up to (8) 1TB 7200 RPM	<b>2.5" SAS 10K RPM 12Gb/s</b> Up to (8) 1.8TB <b>2.5" SAS 15K RPM 12Gb/s</b> Up to (8) 600GB
Storage Controller	<b>Integrated:</b> 2 x Intel chipset AHCI 6Gb/s SATA controllers with 4 ports (total 8) each for HDD/SSD. One port for optical drive (Supports Intel RSTe software RAID 0, 1,5,10 across 4 ports on 1st controller only. (Maximum 4 drives in RAIDset) <b>Optional:</b> Mini-PERC H330 12Gb/s SAS (6Gb/s SATA) 8 port PCIe controller supports software RAID 0,1,5,10 Mini-PERC H730P PCI-e SAS 12Gb/s (SATA 6Gb/s) PCIe controller with 1GB cache memory and backup - supports hardware RAID 0/1/5/10 on Rack 7910. Note Mini-PERC cards use a Mini-PERC slot and do not consume riser card PCIe slots				
Network Daughter Cards	<b>Base:</b> Intel® i350-Quad port 1Gb Ethernet Network Daughter Card (4 x 1Gb ports), <b>Optional:</b> Intel® X540-Dual port 10Gb + Intel I350 Dual port 1Gb Ethernet Network Daughter card (2 x 10Gb + 2 x 1Gb ports ) Intel® X710* Dual port 10Gb DA/SFP+, + I350 Dual port 1Gb Ethernet Network Daughter card Intel® X710* Dual port 10Gb SR/SFP+, + I350 Dual port 1Gb Ethernet Network Daughter card, with SR Optics Intel® X710* Quad Port 10Gb DA/SFP+ Ethernet, Network Daughter Card Intel® X710* Quad Port 10Gb DA/SFP+ Ethernet, Network Daughter Card, with SR Optics <b>Integrated:</b> Integrated Broadcom® BCM5461 Ethernet LAN 10/100/1000 for iDRAC8 controller use with System Management tool suite <b>Optional: Host Bus Adapters:</b> Emulex LPE 12002, Dual Port 8Gb Fibre Channel HBA, QLogic 2562, Dual Port 8Gb Optical Fibre Channel HBA				
1:1 Remote Workstation Access Solutions	Teradici dual and quad display PCoIP™ PCIe remote access host cards & Teradici PCoIP® Workstation Access Software (on host workstation) Dell Wyse 5030/7030 PCoIP Zero clients & Teradici soft clients for Windows and IOS client devices				
Manageability	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 add-in cards	<b>Optional:</b> Dell Precision Ultra-Speed Drive Duo (HH/HL,x8) & Ultra-Speed Drive Quad (FH/FL,x16) with active cooling. Support for up to 2 and 4 M.2 PCIe NVMe SSDs respectively. Optional 1394 a/b PCIe Card (3 Ports – 2x 1394b + 1x 1394a)		Dual & quad display Teradici PCoIP PCIe remote workstation access cards (for host workstation) Optional Serial Port PCIe Card		
I/O Ports	<b>Front</b> 1 – USB 2.0 1 – USB 2.0 Management port (iDRAC8) 1 - VGA Port for iDRAC8 1 - vFlash Media Slot	<b>Internal</b> 1 – USB 2.0 Dual SD Module connector	<b>Rear</b> 2 – USB 3.0 4 – RJ45 Network 1 - RJ45 for iDRAC8 1 - VGA Port for iDRAC8 1 – Serial		
Chassis	<b>HxWxD:</b> 3.41" x 17.0" x 28.37" (29.78" with bezel); 8.66cm x 43.18cm x 72.06cm (75.64cm with bezel) <b>Bays:</b> (1) external slimline optical bay; (8) internal 2.5" bays (support total of (8) 2.5" HDD/SSD drives) <b>Slots:</b> Up to seven PCIe full-length Gen 3 slots (with dual CPUs) in 3 riser cards, maximum 2 double width x16 cards • With single CPU – 3 X x16 (wired as x8) slots (default) or alternative - 1 X x16 & 1 X x16 (wired as x8) slots • With dual CPUs - 1 x16, 3 x16 (wired as x8), 3 low profile x8 (default) or alternative - 2 x16, 1 x16 (wired as x8), 3 low profile x8 <b>Power Supply:</b> One or two redundant hot pluggable 1100W –90% efficient (80PLUS Gold Certified)				
Storage devices	<b>Slimline</b> options: DVD-ROM; DVD+/-RW				
Security Options	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 Protection (DDP): DDP   Security Tools for authentication; DDP   Protected Workspace for malware; DDP   Encryption for data protection				
Regulatory & Environmental	Energy Star® configurations available including 80 PLUS® registered Gold power supplies; EPEAT® registered (see epeat.net for specific registration rating/status by country); China CECP; GS Mark. For a complete listing of declarations & certifications, see Dell's regulatory & compliance homepage at dell.com/regulatory_compliance				
Warranty & Support Services	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 Configurations	Yes				

Some options available only in select regions; ISV certification applies to select configurations 1. A 64-bit operating system is required to support 4GB or more of system memory; 2. GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less; Copyright 2016 Dell Inc. All rights reserved. Intel and Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States of America and other countries. Microsoft, and Windows are trademarks or registered trademarks of Microsoft Corporation in the U.S. and other countries. . Other trademarks or trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. Reproduction in any manner whatsoever without express written permission from Dell Inc. is strictly forbidden.