



## EqualLogic PS6110 Series

The Dell™ EqualLogic™ PS Series storage arrays offer enterprise power with everyday simplicity. The PS6110 Series offer exceptional performance and increased throughput with 10GbE and the flexibility of using SFP+ or 10GBASE-T (copper) — so you can leverage your existing infrastructure or build out lower-cost 10GBASE-T.

### Performance where and when you need it

The EqualLogic PS6110 Series doesn't force you to make a choice between scaling storage performance or expanding capacity. A virtualized, peer-scale architecture delivers high-performance to demanding enterprise applications, even as they grow. PS Series arrays make it possible to purchase only the storage you need when you need it. Sophisticated yet simple management features speed SAN configuration while built-in intelligence senses network connections, automatically builds RAID sets and conducts system health checks. Even multi-generations of PS Series arrays can work together to automatically manage data, load balance across all resources or seamlessly expand the storage pool when you add a new array. The reliable PS6110 Series arrays reduce single points of failure with fully redundant and hot-swappable controllers, fan trays, power supplies, disk drives with hot spares, and vertical port sharing.

### Feature-rich software portfolio

The EqualLogic PS Series arrays include innovative firmware and host software with no additional cost or software licensing fees. What's more, EqualLogic's unique all-inclusive software licensing model allows you to continue to add new features and functionality to your existing hardware as they become available — without charge. So, you can deploy the latest storage innovations without a costly rip-and-replace upgrade. PS Series arrays include enterprise-class storage software features like sub-volume automated tiering, thin provisioning and pointer-based snapshots so you can efficiently deliver the right data to the right place at the right time. In addition, 10GbE arrays feature Data Center Bridging designed to greatly reduce or eliminate dropped packets by standardizing performance over your converged SAN and LAN network.

EqualLogic Host Software extends the functionality of the array-based software, optimizing server and storage cooperation. Host Integration Tools are available for major OS and hypervisor providers, including Microsoft, VMware and Linux.

EqualLogic SAN Headquarters (SAN HQ) gives you in-depth reporting and analysis, consolidated performance and robust event monitoring across multiple EqualLogic groups so you have a well-tuned EqualLogic SAN to meet and surpass your business requirements.

### Find your end-to-end solution

With a variety of system configurations, built for a range of capacity and performance requirements, there is an EqualLogic solution designed to suit your needs. Reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions deliver innovation at any scale. Contact your Dell Sales Representative for more information.

Dell EqualLogic PS Series storage solution has the lowest total cost of ownership over a five year period compared to comparable SAN arrays in the market.\*

\* Source: ESG Lab Report, "Dell EqualLogic TCO Analysis—Multi-generational Manageability and Efficiency at a Low Cost," an April 2012 report sponsored by Dell.

Features	PS6110E/PS6110X	PS6110S/PS6110XS	PS6110XV/PS6110XV 3.5"
Product configurations	Capacity for your data-hungry applications	High performance for your demanding enterprise applications	High-performance storage optimized for your most critical applications
Storage controllers	Dual controllers with 4GB <sup>1</sup> non-volatile memory per controller		
Network interfaces	Management network: One 100BASE-TX per controller Interface ports: One 10GBASE-T with RJ45 and one 10GbE SFP+ for fibre or twin-ax copper cabling		
Hard disk drives	PS6110E: Twenty-four (24) hot-pluggable NL-SAS drives PS6110X: Twenty-four (24) hot-pluggable SAS drives	PS6110S: Twenty-four (24) hot-pluggable SSDs PS6110XS: Seven (7) hot-pluggable SSDs and seventeen (17) hot-pluggable SAS drives	PS6110XV/PS6110XV 3.5": Twenty-four (24) 15K SAS hot-pluggable drives
Drive capacities	PS6110E: 3.5" 7.2K NL-SAS drives available in 1TB†, 2TB 3TB, or 4TB (3TB and 4TB available in NL-SAS SED)  PS6110X: 2.5" 10K SAS drives available in 600GB, 900GB, and 1.2TB (900GB also available in SAS SED)	PS6110S: 2.5" SSDs available in 400GB and 800GB  PS6110XS: Combines 2.5" 400GB and 800GB SSDs and 2.5" 600GB and 1.2TB 10K SAS drives	PS6110XV: 2.5" 15K SAS drives available in 300GB (300GB also available in SAS SED) PS6110XV 3.5": 3.5" 15K SAS disk drives available in 600GB (600GB also available in SAS SED)
System capacities	PS6110E: Up to 96TB PS6110X: Up to 28.8TB	PS6110S: Up to 19.2TB PS6110XS: Up to 26TB	PS6110XV: Up to 7.2TB PS6110XV 3.5": Up to 14.4TB
Self-Encrypting Drives (SED)	PS6110E: 96TB using twenty-four (24) 4TB NL-SAS drives PS6110X: 21.6TB using twenty-four (24) 900GB 10K SAS drives	N/A	PS6110XV: 7.2TB using twenty-four (24) 300GB 15K SAS drives PS6110XV 3.5": 14.4TB using twenty-four (24) 600GB 15K 3.5" SAS drives
<b>Technical highlights</b>			
Host protocol	Any standards-compliant iSCSI initiator		
OS supported	Microsoft® Windows Server® including Hyper-V® VMware® ESX Server Red Hat® Enterprise Linux® (RHEL) SUSE® Enterprise Linux® (SLES) Oracle® Linux Oracle® Solaris™ IBM® AIX® HP-UX Mac OS® X Citrix® XenServer® Novell® NetWare® For a complete list of supported OS versions including software initiators, NICs/CNAs, and HBAs, please see the <a href="#">EqualLogic Compatibility Matrix</a> .		
RAID supported	All PS series except PS6110XS: RAID 5, RAID 6, RAID 10, and RAID 50 <sup>2</sup> ; PS6110XS: RAID-6 Accelerated		
TCP network support	IPv4, IPv6 core support		
Expansion option	Can be combined with other EqualLogic PS Series arrays in the same SAN group, online. A maximum of 16 total members per group.		
Reliability	Redundant hot-swappable controllers with vertical port sharing Hot-swappable disks and power supplies		
Enclosure monitoring system	Automatic spare configuration and utilization; SMART; Automatic bad block replacement; Auto-Stat Disk Monitoring System (ADMS) to monitor health of data on disk drives		
Management interfaces	SAN Headquarters multi-group performance and event monitoring tool; Serial console; Ability to configure a separate management network; SNMP, telnet, SSH, HTTP, Web (SSL), host scripting; Multi-administrator support		
Security	CHAP authentication; Access control for iSCSI; Access control for management interfaces including Active Directory, LDAP, or RADIUS support		
Notification methods	SNMP traps, email, syslog		
Physical	PS6110X, PS6110S, P6110XS & PS6110XV Height: 2U/8.68 cm (3.41 inches) Width 44.63 cm (17.57 inches) Depth: 54.1 cm (21.3 inches) Weight: 24.1 kg (53.1 lb)	PS6110E & PS6110XV 3.5 Height: 4U/17.5cm (6.89 inches) Width 44.63cm (17.57 inches) Depth: 57.5cm (22.6 inches) Weight: 44.45kg (98 pounds)	
Power	PS6110E & PS6110XV 3.5: Power supplies: Dual 1080W; PS6110X, PS6110S, P6110XS & PS6110XV: Power supplies: Dual 700W DC Voltage: -48 to -60 DC		
Rack support	ReadyRails™ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded-hole racks		
Dell support and optional storage service offerings	Dell ProSupport Plus for critical systems or Dell ProSupport for premium hardware and software support are recommended to provide you the right support services for your EqualLogic solution. <sup>3</sup> Contact your Dell representative today for more information.		

<sup>1</sup> GB means 1 billion bytes, TB equals 1 trillion bytes and PB equals 1 quadrillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

<sup>2</sup> RAID 5 is also available for non-production data, but is generally not recommended; RAID 50 is similarly not recommended for production data on drives larger than 2TB.

<sup>3</sup> Availability and terms of Dell Services vary by region. Dell Basic Service is included standard with EqualLogic units. For more information, visit [Dell.com/ServiceDescriptions](http://Dell.com/ServiceDescriptions).

## Global services and support

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.

## Learn more at [Dell.com/EqualLogic](http://Dell.com/EqualLogic)

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