



Relion™ 107 & 700

Green, Economical Servers for Cloud / Web Farms

High Efficiency Design with Sophisticated Management Reduces Total Cost of Ownership

Relion 107 Features

- » 1U rack mount server
- » Single Intel Xeon 3400 Quad Core Processor
- » Up to 48GB of RAM
- » SATA and SSD storage options
- » Integrated IPMI 2.0 management capabilities

Relion 700 Features

- » 1U rack mount server
- » Dual Intel Xeon 5500 Quad Core Processors
- » Up to 96GB of RAM
- » SATA and SSD storage options
- » Integrated IPMI 2.0 management capabilities

Applications

- » Management/monitoring of the network
- » Web server farms
- » Computing Clusters with hard power/cooling constraints

Relion 107 / 700 – New Green Penguins

Latest Penguin Relion servers combine Intel Xeon 3400 and 5500 series high-performance CPUs with high efficiency and low power system design, enabling deployment in power and cooling-constrained environments. Both platforms feature Intel's new I/O architecture based on QPI (QuickPath Interconnect) technology, fully enabling high performance interconnects for clustering and storage access.

Total Cost of Ownership

All Penguin servers incorporate essential RAS (Reliability, Availability, Serviceability) features in order to enable preemptive maintenance, high availability and reduced cost of operation. Relion 107 and 700 both include integrated management processors for complete remote health monitoring support. Optional remote KVM (Keyboard/Video/Mouse) support is available to facilitate remote provisioning and troubleshooting. High efficiency power supplies and system design helps to reduce the thermal load, resulting in higher reliability and reduced cost of power and cooling.

Options for Enterprise and Clustering

Penguin Computing's Relion servers are available with a rich set of I/O options and supporting infrastructure for both enterprise data center and High Performance Computing environments. Our focus is integrated solutions consisting of Penguin servers, high performance messaging fabrics, storage infrastructure and necessary power and cooling solutions. Penguin has in-depth expertise on InfiniBand fabrics, including the latest QDR generation. Fiber channel host connectivity, SAN switches and storage backends are also readily available.

Designed for Linux

All Penguin servers have been tested for compatibility with major commercial and free Linux distributions. Relion servers are available with Red Hat Enterprise Linux, SuSE Linux Enterprise Server or CentOS preinstalled. HPC clusters built from Relion servers can be effectively provisioned and managed by Scyld ClusterWare software from Penguin. Scyld ClusterWare is a fourth generation cluster management platform designed to make a cluster as easy to manage as a single system. Scyld ClusterWare has been architected by the 'father' of Linux clustering, Penguin Computing's CTO Donald Becker.



Technical Specifications - Relion 107 / 700 Servers

	Relion 107	Relion 700
Form Factor	1U rackmount server	
Processors	Single Intel Xeon 3400 Series Quad Core CPU	Up to two Intel Xeon 5500 series quad core processors
Bus Speed	Intel QuickPath Interconnect, up to 6.4GT/s depending on CPU option selected	
Cache	8MB level 3 cache	
Chipset	Intel 3420	Intel 5500
Memory	DDR3-1333, 6 DIMM slots, up to 48GB	DDR3-1333, 8 DIMM slots, up to 64GB
Expansion Slots	1 x PCI Express gen2 x8 Low Profile slot	1 x PCI Express gen2 x16 slot, wired for x8 lanes Dedicated expansion slot for optional RAID controller
Internal Storage	3 hot swap drive bays for 3.5" drives Enterprise class 7200rpm SATA drives, up to 2TB Enterprise class Solid State Drives based on SLC (Single Level Cell) flash technology	4 hot swap drive bays for 3.5" drives Enterprise class 7200rpm SATA drives, up to 2TB Enterprise class Solid State Drives based on SLC (Single Level Cell) flash technology Optional hardware RAID
Network Interfaces	Integrated dual Intel 10/100/1000Mbps Ethernet	
Ports	2 x USB 2.0 PS2 keyboard and mouse 2 x LAN serial port VGA	2 x USB 2.0 PS2 keyboard and mouse 2 x LAN serial port VGA
Management	IPMI 2.0 management processor with support for remote power control, remote console and server health monitoring	
Power Supply	350W Nonredundant High Efficiency Power Supply	650W Nonredundant High Efficiency Power Supply
Dimensions	1.70" H x 16.93" W x 25.51" D	1.70" H x 16.93" W x 27.38" D
Warranty Warranty	Standard 3-year warranty included with every Penguin Computing server	

1-888-PENGUIN