Modern data centers need flexible computing resources that can be deployed at scale. The Penguin Computing® Relion® XE1312 server provides dual Intel® Xeon® Scalable processors, fast and efficient memory, and up to 12 x 2.5” drive bays for flexible and dense storage. With powerful compute and dense storage in a single server, the Relion XE1312 server is an optimal platform for Cloud and HPC deployments at scale.

Key Features

- Dual Intel® Xeon® Scalable processors at up to 350W each for performance configurations
- Up to 8TB DDR5-4800MHz (32 DIMMs) to deliver speed and efficiency for data-intensive workloads
- Storage density for up to 12 x 2.5” hot-swap drive bays with SAS/SATA and NVMe support
- Up to two PCI Express x16 Gen 5 low profile slots plus two OCP mezzanine slots for additional connectivity
## Technical Specifications

### Form Factor
- Form factor: 1U Rackmount

### Processors
- Processor Number: 2
- Processor Type: Intel® Xeon® Scalable Processor, Sapphire Rapids (SPR)
- Maximum TDP: 270~350W

### Motherboard
- Chipset: SoC

### Board Management
- BMC Chipset: ASpeed AST2600
- Dedicated BMC Interface: RJ45
- IPMI 2.0: Yes
- Virtual Media Over LAN: Yes
- KVM Over LAN: Yes
- RedFish: Yes

### Memory
- Memory Type: DDR5-4800MHz
- Memory Capacity: Up to 4TB per socket

### Storage System
- Hard Drive Bays: U.2 NVMe (2.5") 12

### Networking
- Ethernet Controller: Intel I350
- On-Board LAN: 2x 1GbE/RJ45

### PCI Expansion Slots
- Number of Slots/Gen/Speed (Size): 2x PCIe Gen5 x16 FHHL

### Mezzanine Expansion Options
- OCP Mezzanine: Storage OCP Mezz N/A
- Network OCP Mezz: 2

### Supported Operating System
- Supported OS: RHEL, Rocky

### Power System
- Power Supply Size: 2x 1600W PSU, 80Plus Platinum or 2x 2000W PSU, 80Plus Platinum

### Regulatory Compliance
- Regulations: CE, FCC

### Mounting Hardware
- Rackmount Rails: Standard Rails Included
**Operating Environment**

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<table>
<thead>
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<tbody>
<tr>
<td>Operating Temperature</td>
<td>10°C to 35°C</td>
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<tr>
<td>Non-operating Temperature</td>
<td>0°C to 60°C (32°F to 140°F)</td>
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<tr>
<td>Operating Relative Humidity</td>
<td>30% to 80% (non-condensing)</td>
</tr>
<tr>
<td>Non-operating Relative Humidity</td>
<td>20%-95% (non-condensing)</td>
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**System Dimensions & Weight**

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<tbody>
<tr>
<td>Height</td>
<td>1.69 inches</td>
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<tr>
<td>Width</td>
<td>17.2 inches</td>
</tr>
<tr>
<td>Depth</td>
<td>28.7 inches</td>
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<tr>
<td>Machine Weight</td>
<td>Approximately 46 lbs</td>
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<tr>
<td>Shipping Weight</td>
<td>Approximately 60 lbs</td>
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**Warranty**

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<tr>
<td>Warranty</td>
<td>3 Year Standard; Up to 4 years on-site available</td>
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**Learn More**

Visit www.penguincomputing.com to learn more about our servers.

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**ABOUT PENGUIN SOLUTIONS**

***An SGHI™ Brand***

Penguin Solutions accelerates digital transformation with the power of emerging technologies in HPC, AI, and IoT with solutions and services that span the continuum of edge, core, and cloud.

Penguin Computing specializes in innovative and emerging technologies for the world’s most demanding workloads.

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