Modern data centers need flexible computing resources that can be deployed at scale. The Penguin Computing® Relion® XE2312 server provides a perfect balance of the latest Intel Xeon 4th Generation Scalable processors along with dense storage availability, allowing up to 28 x 2.5" drive bays with SATA and NVME U.2 support. With this much compute and dense storage in a single server, the Relion® XE2312 server is an optimal platform for Cloud and HPC deployments at scale.
# Technical Specifications

## Form Factor
- Form factor: 2U 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")
- Number of Bays: Up to 24

## Networking
- Ethernet Controller: Intel i350-AT2
- On-Board LAN: 2x 1GbE/RJ45

## PCI Expansion Slots
- Number of Slots/Gen/Speed (Size): 4xPCIe Gen 5 x16 FHHL as per R283-S92-AAE1 spec

## External I/O Interfaces
- USB Ports: 2 x USB 3.0
- VGA Ports: 1x MiniDP

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

## Power System
- Power Supply Size: 2x 2000W 80+ Platinum as per R283-S92-AAE1 Spec

## Regulatory Compliance
- Regulations: CE, FCC

## Mounting Hardware
- Rackmount Rails: Standard Rails included
### Operating Environment

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>10 C to 35 C (50 F to 95 F)</td>
</tr>
<tr>
<td>Non-operating Temperature</td>
<td>0 C to 60 C (32 F to 140 F)</td>
</tr>
<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>
</tr>
</tbody>
</table>

### System Dimensions & Weight

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>3.44 inches</td>
</tr>
<tr>
<td>Width</td>
<td>17.2 inches</td>
</tr>
<tr>
<td>Depth</td>
<td>32.1 inches</td>
</tr>
<tr>
<td>Machine Weight</td>
<td>Approximately 55 lbs</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>Approximately 65 lbs</td>
</tr>
</tbody>
</table>

### Warranty

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warranty</td>
<td>3 Year Standard; Up to 4 years on-site available</td>
</tr>
</tbody>
</table>

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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.