

# PAC STORAGE

## PAC STORAGE ALL-FLASH NVME FAMILY PRODUCT LINE



### All Flash NVMe NAS, SAN & Object Enterprise Data Storage

PAC Storage PS All Flash NVMe systems delivers uncompromising performance, scalability, and reliability for the most demanding enterprise workloads. Engineered for ultra-low latency and maximum throughput, the PS 3000 and PS 5000 series are purpose-built for modern data-intensive environments — from AI/ML and high-performance computing to large-scale media workflows, virtualization, and mission-critical databases.

With full redundancy, advanced data services, and seamless scalability up to multi-petabyte levels, PAC Storage All Flash platforms provide the foundation for enterprise data centers.

**All Flash NVMe 5000 rear view**



**All Flash NVMe 3000 rear view**



### HIGHLIGHTS OF PS NVME LINE:

#### High Performance & Scalability

- Massive Sequential Throughput 1.3M IOPS
- 5000: up to 50GB/s read, 25GB/s write; 3000: up to 24GB/s Read and 12GB/s Write
- Scalable with 24G SAS and 12 SAS expansion
- Symmetric Active-Active Controllers

#### Full Redundancy, Complete Data Protection

- High Availability with 5x 9's uptime
- All Components are hot-swappable
- RAID, Snapshot, Remote replication and WORM technology
- Object Storage and Immutable Data Options

#### Extreme Flexibility and Simple Management

- Can run NAS (file), SAN (block) and object storage simultaneously
- Many Connectivity options up to 200GbE
- Cloud Gateway option available
- Easy User Interface- CLI and Web Based
- Single Namespace

#### Complete US Based Service & Tech Support

- Comes standard with 3 year warranty expandable to 10 years
- US-Based Service and Tech Support
- Government GSA Certified & Approved
- Next business day advance replacement

## HARDWARE SPECIFICATIONS

| Product Series                                                |                                                            |        | NVMe 3000                                                                                                                                                                                                                                                                                                       | NVMe 5000                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------|------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                                                   | 2U 24-bay                                                  |        | PS 3024U                                                                                                                                                                                                                                                                                                        | PS 5024U                                                                                                                                                                                                                                                               |
|                                                               | 4U 48-bay                                                  |        | PS 3048U                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                        |
| Controller                                                    |                                                            |        | Dual redundant                                                                                                                                                                                                                                                                                                  | Dual redundant                                                                                                                                                                                                                                                         |
| Cache Backup Technology                                       |                                                            |        | Super capacitor + flash module                                                                                                                                                                                                                                                                                  | Super capacitor + flash module                                                                                                                                                                                                                                         |
| CPU                                                           |                                                            |        | Intel® Xeon® D 4-Core                                                                                                                                                                                                                                                                                           | Intel® Xeon® Scalable 12-Core                                                                                                                                                                                                                                          |
| Cache Memory                                                  |                                                            |        | Default DDR4 48GB, up to 384GB                                                                                                                                                                                                                                                                                  | Default DDR5 128GB, up to 1024GB                                                                                                                                                                                                                                       |
| Supported Drives                                              |                                                            |        | 2.5" U.2 NVMe SSD (must be purchased from Infortrend)                                                                                                                                                                                                                                                           | 2.5" U.2 NVMe SSD (must be purchased from Infortrend)                                                                                                                                                                                                                  |
| Max. Drive Number                                             | Via Expansion Enclosures, per Appliance                    |        | 896                                                                                                                                                                                                                                                                                                             | 896                                                                                                                                                                                                                                                                    |
|                                                               | Via Scale-out with Other Series of Appliances, per Cluster |        | 3584                                                                                                                                                                                                                                                                                                            | 3584                                                                                                                                                                                                                                                                   |
| Max. SSD Cache Pool (Block Level)                             |                                                            |        | 4TB                                                                                                                                                                                                                                                                                                             | 4TB                                                                                                                                                                                                                                                                    |
| Onboard 10GbE Ports (SFP+)                                    |                                                            |        | 0                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                      |
| Onboard 25GbE Ports (SFP28)                                   |                                                            |        | 4                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                      |
| Host Board Slots                                              |                                                            |        | 4                                                                                                                                                                                                                                                                                                               | 6                                                                                                                                                                                                                                                                      |
| Host Board Options                                            |                                                            |        | <ul style="list-style-type: none"><li>• 16Gb/s FC x 4</li><li>• 32Gb/s FC x 2</li><li>• 32Gb/s FC x 4</li><li>• 10GbE (SFP+) x 2</li><li>• 25GbE (SFP28) x 2, RDMA</li><li>• 25GbE (SFP28) x 4, RDMA</li><li>• 100GbE (QSFP28) x 1, RDMA</li><li>• 100GbE (QSFP56) x 2, RDMA</li><li>• 12Gb/s SAS x 2</li></ul> | <ul style="list-style-type: none"><li>• 32Gb/s FC x 4</li><li>• 25GbE (SFP28) x2, RDMA</li><li>• 25GbE (SFP28) x4, RDMA</li><li>• 100GbE (QSFP28) x 1, RDMA</li><li>• 100GbE (QSFP56) x 2, RDMA</li><li>• 200GbE (QSFP56) x 1, RDMA</li><li>• 12Gb/s SAS x 2</li></ul> |
| Max. 16Gb/s FC Ports                                          |                                                            |        | 16                                                                                                                                                                                                                                                                                                              | 0                                                                                                                                                                                                                                                                      |
| Max. 32Gb/s FC Ports                                          |                                                            |        | 16                                                                                                                                                                                                                                                                                                              | 24                                                                                                                                                                                                                                                                     |
| Max. 10GbE Ports (SFP+)                                       |                                                            |        | 8                                                                                                                                                                                                                                                                                                               | 24                                                                                                                                                                                                                                                                     |
| Max. 25GbE Ports (SFP28)                                      |                                                            |        | 20                                                                                                                                                                                                                                                                                                              | 6                                                                                                                                                                                                                                                                      |
| Max. 100GbE Ports (QSFP28)                                    |                                                            |        | 4                                                                                                                                                                                                                                                                                                               | 12                                                                                                                                                                                                                                                                     |
| Max. 100GbE Ports (QSFP56)                                    |                                                            |        | 8                                                                                                                                                                                                                                                                                                               | 6                                                                                                                                                                                                                                                                      |
| Max. 12Gb/s SAS Ports                                         |                                                            |        | 8                                                                                                                                                                                                                                                                                                               | 12                                                                                                                                                                                                                                                                     |
| Expansion Enclosures                                          |                                                            |        | JB 4024U, JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, JB 3060L, JB 3090                                                                                                                                                                                                                                           | JB 4024U, JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, JB 3060L, JB 3090, JB 4090                                                                                                                                                                                         |
| Dimensions (Without Chassis Ears and Protrusions) (W x H x D) |                                                            |        | <ul style="list-style-type: none"><li>• 2U 24-bay: 449 x 88 x 530 mm</li><li>• 4U 48-bay: 449 x 176 x 530 mm</li></ul>                                                                                                                                                                                          | 449 x 88 x 830 mm                                                                                                                                                                                                                                                      |
| Package Dimensions (W x H x D)                                |                                                            |        | <ul style="list-style-type: none"><li>• 2U 24-bay: 588 x 239 x 780 mm</li><li>• 4U 48-bay: 588 x 423 x 780 mm</li></ul>                                                                                                                                                                                         | 594 x 235 x 1106 mm                                                                                                                                                                                                                                                    |
| Power Supply Unit                                             | Power Supplies (Redundant and Hot-swappable)               | Global | <ul style="list-style-type: none"><li>• 2U 24-bay: 530W x 2 (80 PLUS Bronze)</li><li>• 4U 48-bay: 1300W x 2 (80 PLUS Titanium)</li></ul>                                                                                                                                                                        | 1600W x 2 (80 PLUS Titanium)                                                                                                                                                                                                                                           |
|                                                               |                                                            | EU     | <ul style="list-style-type: none"><li>• 2U 24-bay: 800W x 2 (80 PLUS Titanium)</li><li>• 4U 48-bay: 1300W x 2 (80 PLUS Titanium)</li></ul>                                                                                                                                                                      |                                                                                                                                                                                                                                                                        |
|                                                               | AC Voltage                                                 | Global | <ul style="list-style-type: none"><li>• 2U 24-bay: 100-240VAC @10-5A</li><li>• 4U 48-bay: 100-127VAC @12A, 200-240VAC @8.5A</li></ul>                                                                                                                                                                           | 100-127VAC @12A, 200-240VAC @10A                                                                                                                                                                                                                                       |
|                                                               |                                                            | EU     | <ul style="list-style-type: none"><li>• 2U 24-bay: 100-127VAC @10A, 200-240VAC @5A</li><li>• 4U 48-bay: 100-127VAC @12A, 200-240VAC @8.5A</li></ul>                                                                                                                                                             |                                                                                                                                                                                                                                                                        |
|                                                               | Frequency                                                  |        | 50-60 Hz                                                                                                                                                                                                                                                                                                        | 50-60 Hz                                                                                                                                                                                                                                                               |
| Safety Standards                                              |                                                            |        | <ul style="list-style-type: none"><li>• Electromagnetic compatibility: CE, BSMI, FCC</li><li>• Safety: UL, BSMI, CB</li></ul>                                                                                                                                                                                   | <ul style="list-style-type: none"><li>• Electromagnetic compatibility: CE, BSMI, FCC</li><li>• Safety: UL, BSMI, CB</li></ul>                                                                                                                                          |

## SOFTWARE SPECIFICATIONS

|                              |              |                                                                                                                            |
|------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------|
| Max. Logical Drive Number    |              | 30                                                                                                                         |
| Max. Logical Drive Capacity  |              | 512TB                                                                                                                      |
| Stripe Size                  |              | 16KB, 32KB, 64KB, 128KB, 256KB, 512KB, 1024KB (per logical drive)                                                          |
| Write Policy                 |              | Write-back or write-through (per logical drive)                                                                            |
| Max. Pool Size               |              | 2PB                                                                                                                        |
| Max. Pool Number             |              | 30                                                                                                                         |
| Max. Volume Size             |              | 2PB                                                                                                                        |
| Max. Volume Number           |              | 1024                                                                                                                       |
| Max. Host LUN Mapping Number |              | 4096                                                                                                                       |
| Max. Reserved Tag Number     |              | 256 (per Host-LUN connection)                                                                                              |
| Max. iSCSI Initiators        |              | 832                                                                                                                        |
| Max. Host Connection Number  |              | 128 (per FC)                                                                                                               |
| RAID Options                 |              | RAID 0, RAID 1, RAID 3, RAID 5/5F, RAID 6/6F, RAID 10, RAID 30, RAID 50, RAID 60                                           |
| Supported Protocols          | File Level   | CIFS/SMB (version 2.0/3.0), NFS (version 2/3/4), AFP (version 3.1.12), FTP/FXP (vsftp 2.3.4), WebDAV (httpd package 2.4.6) |
|                              | Block Level  | FC, iSCSI, SAS, NVMe/TCP, NVMe/RDMA                                                                                        |
|                              |              | <b>Note:</b> NVMe/RDMA is supported only on host channels with RDMA functionality.                                         |
|                              | Object Level | RESTful API                                                                                                                |

## SOFTWARE SPECIFICATIONS CONTINUED

|                              |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| File Level                   | Max. File System Size                     | 2PB                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Local Users                | 20000                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Local Groups               | 512                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Domain Users and Groups    | The number depends on the memory capacity of a single controller and the system configuration.<br>• 8GB: 50,000   • 16/24GB: 100,000   • 32/48GB: 200,000   • 64GB: 400,000   • 96GB and up: 500,000                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Shared Folders             | 2048 (NFS/CIFS/FTP)   255 (AFP)                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Rsync Jobs                 | 1024                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Concurrent Rsync Processes | 64                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | Max. Number of Connections                | 2048 (NFS/CIFS/AFP)   1024 (FTP)                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                       |
| Management                   |                                           | <ul style="list-style-type: none"> <li>• Web-based EonOne management software</li> <li>• User account management</li> <li>• Group management</li> <li>• Folder management - folder access control</li> <li>• Quota management</li> <li>• Folder encryption with AES</li> </ul>                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Integration with Microsoft Active Directory (AD) and Linux LDAP</li> <li>• Storage Resource Management to analyze history of resource usage</li> <li>• Multi-factor authentication login mechanism</li> <li>• File-level QoS (network traffic control)</li> <li>• SMI-S standard interface for hypervisor management applications</li> </ul> |
| Availability and Reliability |                                           | <ul style="list-style-type: none"> <li>• Immutable object storage</li> <li>• Hot-swappable hardware modules</li> <li>• Device mapper</li> <li>• Antivirus</li> <li>• Trunk group</li> </ul>                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Cache safe technology</li> <li>• UPS</li> <li>• WORM (file level only)</li> <li>• SMB Multichannel</li> </ul>                                                                                                                                                                                                                                |
| Efficiency                   |                                           | <ul style="list-style-type: none"> <li>• Block level: Offline compression, offline deduplication</li> <li>• File level: Inline compression, offline deduplication</li> </ul>                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                       |
| Notification                 |                                           | • Email                                                                                                                                                                                                                                                                                                                                                                                                                                               | • SNMP traps                                                                                                                                                                                                                                                                                                                                                                          |
| Applications                 |                                           | <ul style="list-style-type: none"> <li>• Anti-virus</li> <li>• Backup Server</li> <li>• Docker</li> <li>• LDAP Server</li> <li>• Mail Server</li> <li>• Nextcloud</li> </ul>                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Project Server</li> <li>• Proxy Server</li> <li>• Syslog Server</li> <li>• VPN Server</li> <li>• Web Server</li> </ul>                                                                                                                                                                                                                       |
| Supported Cloud Services     |                                           | EonCloud Gateway supports integration with the following cloud providers: Backblaze B2, Amazon S3, Microsoft Azure, Alibaba Cloud, OpenStack, Baidu Cloud, Google Cloud, Tencent Cloud, Wasabi Cloud, etc.<br><b>Note:</b> For complete information about supported cloud providers, please refer to EonCloud Gateway webpage <a href="https://www.infortrend.com/global/solutions/eoncloud">https://www.infortrend.com/global/solutions/eoncloud</a> |                                                                                                                                                                                                                                                                                                                                                                                       |
| Supported OS                 |                                           | Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise, Sun Solaris, MacOS X, VMware<br><b>Note:</b> For supported OS versions, please refer to the Compatibility Guide.                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                       |

## DATA SERVICES

|                           |                    |             |                                                                                                                                                                          |                                                                                                                     |                                  |
|---------------------------|--------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Thin Provisioning         |                    | Block Level | Default                                                                                                                                                                  | "Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space. |                                  |
| Local Replication         | Snapshot           | File Level  | Optional                                                                                                                                                                 | Snapshot images per folder: 1024                                                                                    |                                  |
|                           |                    | Block Level | Default                                                                                                                                                                  | Snapshot images per source volume: 64                                                                               | Snapshot images per system: 128  |
|                           | Volume Copy/Mirror | Optional    | Snapshot images per source volume: 256                                                                                                                                   | Snapshot images per system: 4096                                                                                    |                                  |
|                           |                    | Default     | Replication pairs per source volume: 4                                                                                                                                   | Replication pairs per system: 16                                                                                    |                                  |
|                           |                    | Optional    | Replication pairs per source volume: 8                                                                                                                                   | Replication pairs per system: 256                                                                                   |                                  |
| Remote Replication        |                    | File Level  | Default                                                                                                                                                                  | Support Rsync with 128-bit SSH encryption                                                                           |                                  |
|                           |                    | Block Level | Optional                                                                                                                                                                 | Replication pairs per source volume: 8                                                                              | Replication pairs per system: 64 |
|                           |                    |             | <b>Note:</b> The maximum number of replication pairs per source volume is 8, whether they are remote asynchronous pairs, remote synchronous pairs, or local volume pairs |                                                                                                                     |                                  |
| Automated Storage Tiering |                    |             | Optional                                                                                                                                                                 | Storage tiers per pool: 4                                                                                           |                                  |
| Scale-out                 | File Level         | Default     | Appliances per cluster: 1                                                                                                                                                |                                                                                                                     |                                  |
|                           |                    | Optional    | Appliances per cluster: 4                                                                                                                                                |                                                                                                                     |                                  |
|                           | Block Level        | Default     | Appliances per cluster: 4                                                                                                                                                |                                                                                                                     |                                  |
| HA Service                | File Level         | Optional    | Delivering continuous availability and eliminating downtime for mission-critical workloads that require non-stop operations                                              |                                                                                                                     |                                  |
|                           | Block Level        |             | <b>Note:</b> HA Service is not available on GS 2000U.                                                                                                                    |                                                                                                                     |                                  |
| SSD Cache                 | File Level         | Optional    | Accelerating file operations and data access performance for both read and write<br>Max. SSD number: 8                                                                   |                                                                                                                     |                                  |
|                           | Block Level        | Optional    | Accelerating data access in random read-intensive environments (e.g. OLTP) Max. SSD number: 4                                                                            |                                                                                                                     |                                  |
|                           |                    |             | Recommended DIMM capacity per controller for SSD cache pool                                                                                                              |                                                                                                                     |                                  |
|                           |                    |             | DRAM : 8GB                                                                                                                                                               | Max SSD cache pool size : 0.5TB                                                                                     |                                  |
|                           |                    |             | DRAM : 16GB                                                                                                                                                              | Max SSD cache pool size : 1TB                                                                                       |                                  |
|                           |                    |             | DRAM : 32GB                                                                                                                                                              | Max SSD cache pool size : 2TB                                                                                       |                                  |
|                           |                    |             | DRAM : 64GB and up                                                                                                                                                       | Max SSD cache pool size : 4TB                                                                                       |                                  |