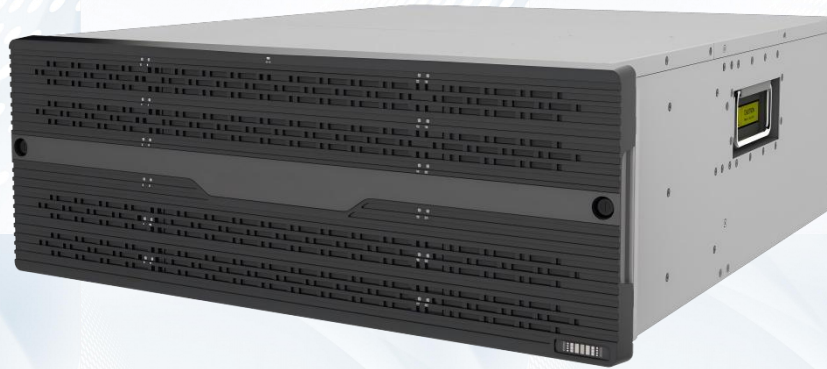# EN1824 IPSAN network storage device

Product Overview

EN1800 series storage products are a new generation of storage products with extremely high cost performance tailored for AIOT solutions by Uniview Technology. EN1800 series storage products integrate data management, permanent data protection, block virtualization RAID technology, and the industry's top disk management technology. They have the characteristics of high performance, high reliability, strong expansion, easy management, and easy maintenance. They also integrate iSCSI, FC, NFS, and CIFS storage protocols, and can provide block storage and file storage at the same time, providing users with a full range of storage solutions.

Features

high performance

iSCSI solves the inherent fragmentation problem of file storage

Specialized cache algorithm greatly improves disk access performance and extends disk life

SSDCache, greatly improving the access performance of hot data

Fusion

SAN and NAS are integrated. One device provides both SAN and NAS, providing block access and file access services.

IPSAN and FCSAN are integrated, supporting 8Gb/s and 16Gb/s FC interfaces, Gigabit and 10G Ethernet interfaces

Heterogeneous integration supports mapping the storage resources of third-party devices to VX18 series devices through the iSCSI protocol, locally managing third-party storage resources and providing them for external use.

RAID Features

Block virtualization technology RAID-NT, supports dynamic storage pool, automatic data load balancing, hot spare space evenly distributed on each disk in the storage pool, and reconstruction performance> 2TB/h

RAID reconstruction, automatically adjusts the reconstruction speed of the array group according to the current system busyness;

Reconstruction in seconds: only the changed parts of the data are rebuilt, which can shorten the reconstruction time to seconds

Rapid reconstruction: Rebuild data by copying, and migrate endangered data to hot spare disk in a short time.

Disk pre-copying, supports disk health management, and pre-copying data for risky disks

Inspection, repair, and fault tolerance: automatic array inspection, disk fault repair, and disk bad block remapping functions effectively reduce disk failures; disk fault tolerance processing ensures business continuity when multiple disks in the array have errors.

Disk migration, supporting online hot swapping of disks and migration of disks between device arrays

Data Protection

Mirroring function: when the primary resource fails, the online business automatically and seamlessly switches to the mirrored resource to maintain business continuity

Snapshot function: data can be restored through snapshot rollback, and another data access channel is provided through snapshot view/copy

Data replication/backup: critical data can be replicated/backed up locally or remotely between devices

Data safe: after the system loses power abnormally, the system continues to supply power to ensure that the cached data is written into the data safe, ensuring the integrity of the data

WORM function, WriteOnceReadMany, which means write once and read many times, protects important data from tampering

Link protection, supporting link aggregation and dynamic fault switching, improving data read and write bandwidth while ensuring the availability and smoothness of data paths

Hardware Design

Modular redundant components, cable-free design, all modules are interconnected with telecom-grade connectors, key components such as power modules, battery modules, and fan modules use redundant architecture design, support hot plug and online replacement, ensure business continuity and data reliability, and achieve system availability of 99.999%

Leading hardware, based on Intel 64-bit most advanced multi-core processor design, multi-channel high-performance DDR5 memory interface, advanced PCI-E4.0, SAS4.0 bus technology

Dual BIOS to ensure reliable system startup and safe BIOS update

Two-level watchdog, software and hardware, ensures that the system can automatically restore services without human intervention in the event of a system failure

Intelligent temperature control, adaptive temperature adjustment system automatically senses temperature changes and adjusts the fan's speed in multiple gears. Intelligent fan speed adjustment can not only reduce the fan's own power consumption, but also reduce the fan's rated use and extend the fan's service life.

Dustproof, shock-absorbing, and corrosion-resistant

Unique disk dustproof design effectively blocks dust

Patented disk vibration reduction technology reduces disk resonance transmission and external impact on the disk

Adopt original anti-corrosion early warning technology and patented disk anti-corrosion technology to minimize external corrosion to the disk and extend the service life of the disk

Simple maintenance management

Comprehensive alarm mechanism, supporting indicator alarm, email alarm, SMS alarm, digital tube alarm, SNMP alarm, etc.

Green, environmentally friendly and energy-saving

Disk hibernation: disks without business IO are hibernated to reduce disk power consumption and extend disk service life

CPU intelligent frequency modulation technology automatically adjusts CPU frequency according to business busyness, effectively saving energy consumption

Product Specifications

Item	Description
Number of controllers	1
processor	Intel 64-bit multi-core processor
Single controller memory	Standard 32GB, expandable to 128GB
Network Interface	5 2.5Gb Ethernet ports 4-port 2.5Gb Ethernet port (optional) 2-port 10Gb Ethernet port (optional) 4-port 10Gb Ethernet port (optional)
PCI-E slot	3
Backend extension interface	2 4x12Gbps Mini SAS HD ports (optional)
USB interface	2
Serial Port	1
HDMI interface	2
Disk Type	SATA/SSD
Disk capacity	4~20TB

Number of disk channels	twenty four
Battery	Standard 1/Maximum 2
Power Module	Standard 1/Maximum 2
Power Input	AC power supply: 100V~127V/200V~240V AC; 60Hz/50Hz
Weight (Fully configured disk)	<46kg
Power consumption (full disk configuration)	<452W
Dimensions (H×W×D)	175mm X 482mm X589mm (H×W×D)
Certification	CE, FCC, CB, RoHS, WEEE, CCC, CQC
Operating temperature	5°C~40°C
Recommended operating temperature	10°C~35°C
IPSAN Function	describe
Features	Mirroring, snapshot rollback, snapshot view, snapshot copy, consistent snapshot group, NAS backup, worm, heterogeneous virtualization, block virtualization RAID-NT
RAID	Supports JBOD, RAID 0, 1, 10, 5, 6, 50, RAID-NT Supports multiple hot backup modes such as automatic blank disk global hot backup and dedicated hot backup
Maximum number of logic resources	1024
Protocol	iSCSI, NFS (V2, V3, V4), CIFS/SMB, FTP
Supported operating systems	Windows, Linux, AIX, HP-UNIX, Solaris, VMware, etc.
Alerts	Indicator, email, SNMP Trap, SMS, digital tube, etc.

Ordering Information

Product Model	Product Description
EN1824	24-slot network storage device (with single power supply and single battery by default)