



# N16000

The Superior Enterprise Storage Center



### Intel Xeon for Blazing Speed

Harnessing the power of Intel's Xeon X3480 processor and an overwhelming 4GB of cutting-edge DDR3 RAM, the N16000 can handle anything and everything at full speed. There are no bottlenecks or speed bumps.

### Enterprise Size for Enterprise Tasks

With a whopping 48 terabytes of data capacity, you'll never go wanting again. No matter whether you are providing a public server for a massive workforce or compiling a company's worth of HD video, your NAS will always be hungry for more.

### SATA III and SAS 6G for Ultra-Fast Transfer Speeds

The N16000 features support for internal hard drives with SATA III and SAS 6G. This top-of-the-line connection transfers at speeds up to an amazing 6Gbit/s. It is also backwards-compatible with SATA II, so your old disks can be swapped in and out without a hitch.

### High Availability (HA)

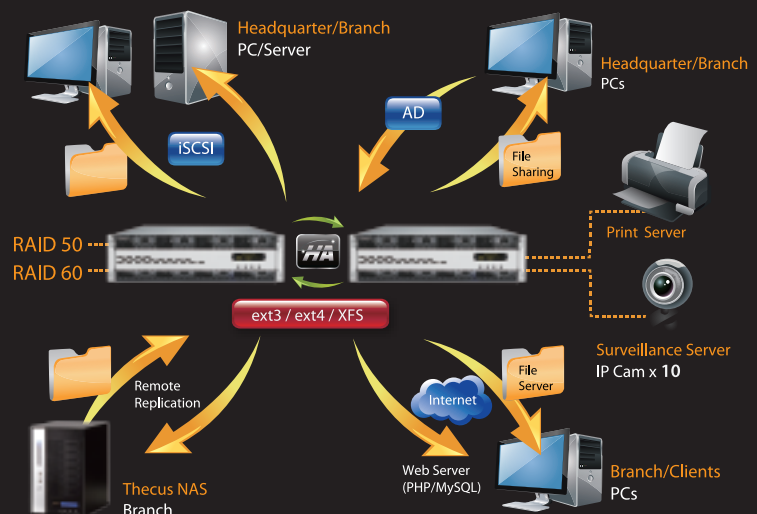
For the first time, your data is completely free of delays in access. Regardless of the situation, HA actively keeps your data on two separate, identical NAS. If one needs maintenance, the other will dutifully rise to the occasion without as much as a blip in service. Whether rain, shine, or Armageddon, your data will always be there.

### Rock-Solid Security

The N16000 safeguards your data with all the RAID modes you could possibly need for an Enterprise server, including RAID 0, 1, 5, 6, 10, 50, 60, and JBOD. Changing damaged hard disks is also a breeze with its built-in hot-swap, hot-spare, online RAID migration and expansion, as well as auto-rebuild capabilities. And if you need even more protection, there is also AES 256bit RAID volume encryption available.

### 10Gb Ethernet and Future Expansion

The future is right around the corner, and the N16000 is leading the way. With its furiously fast 8-lane PCI-e slots, the N16000 can accommodate a number of emerging technologies, including 10Gb Ethernet. The N16000 is ready for 10Gb Ethernet, and will be ready for whatever else comes next.



# N16000

## Specifications

### Hardware Platform

#### Processor

- Intel® Xeon® Processor X3480 Processor + Intel 3450 chipset

#### SAS/SATA controller (HBA), PCI-e (8-lane)

- LSI 2008 HBA card supports 6G SAS/SATA (x8)

#### System memory

- 4GB DDR3 SDRAM

#### LAN interface (PCI-e)

- RJ-45x3: Intel 82574L 10/100/1000 BASE-TX Auto MDI/MDI-X
- WOL supported

#### USB interface

- USB 2.0 host port x6 (front x2, back x4) (Type A)
- USB 3.0 host port x2 (back x2)

#### eSATA

- External (back x2)

#### OLED

- Displays system status and information (Multilingual)

#### LED indicator

- Power: (Blue)
- System busy: (Yellow)
- System alert: Redundant power or system fan failure (Red)
- HDD 1-16 Activity/Fail (Green/Red)

#### PCI-e slots

- 8-lane (x3), One is used by SAS HBA
- 4-lane (x1)
- 1-lane (x1) used by CU30N (USB 3.0)

#### Power supply

- Redundant power supply least 700W or more (80plus)

#### Disk interface

- SATA/SAS (x16) via backplane

#### Thermal/Fan control

- Thermal sensor on processor temperature
- CPU Fan control
- System Fan control

#### System fan

- Hot Swappable (x4)

#### Buttons

- Power button(Front, power down controlled by S/W)
- LCM button (ENT, ESC, UP, DOWN)
- System reset button
- Locator button

#### RS232

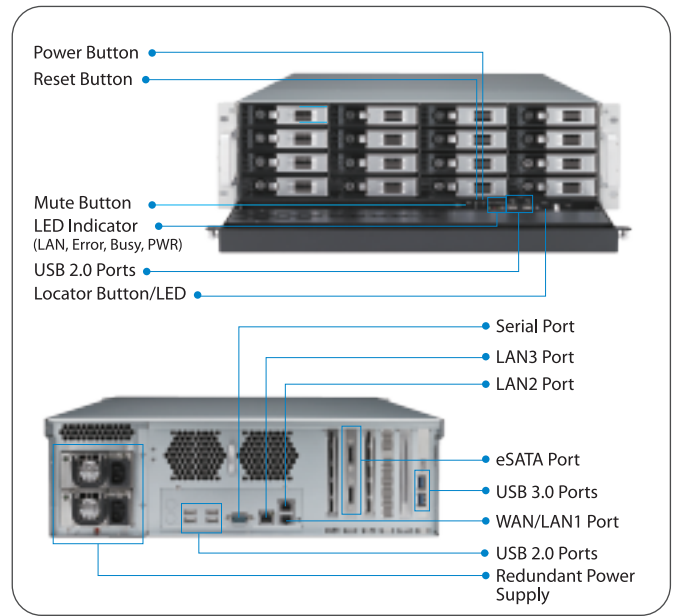
- 1 (For UPS)

#### Environment

- Temperature: 5°C to 40°C
- Humidity: 0 ~ 80 % R.H. (Non-condensing)

#### Dimension

- 3U Rack Mount



### Software Functions

#### RAID

- RAID modes: RAID 0, 1, 5, 6, 10, 50, 60 and JBOD
- Auto-rebuild: Supported
- Hot-swap: Supported
- Dedicated hot spare: Supported
- Global hot spare: Supported
- SMART info: Supported
- SMART test: Supported
- Online RAID migration: Supported
- Online RAID expansion: Supported
- RAID volume encryption: AES256bit

#### Disk

- Power management: Available spin-down while idle setting
- Bad block scanning: Supported
- On-line disk roaming: Supports roaming to other N16000 in volume based

#### Network

- Configuration: Fixed IP Address, Dynamic IP Address
- IP sharing mode: Can be enable/disabled
- Transport protocols: TCP/IP/AppleTalk
- File protocols: SMB/CIFS, HTTP/HTTPS, FTP, NFS v3, AFP
- Link aggregation: 6 modes supported
- 10GbE NIC: Supported

#### Data Access

- Client OS support:
  - Windows 2000/XP/2003/Vista/7
  - UNIX/Linux
  - Mac OS 9/X
- Web disk: Web-based file access
- FTP: Build-in FTP Server with bandwidth control
- Secure FTP: Build-in secure FTP Server with bandwidth control
- Download manager (module): HTTP/FTP/BitTorrent/eMule
- Printer server (IPP):
  1. Supports USB printers
  2. Supports IPP various printers
  3. Client can manage print tasks (list/delete) via web user interface

#### Data Backup

- Client schedule incremental data backup: Acronis True image(OEM version)
- Client system disaster recovery: Acronis True image(OEM version)
- NAS remote replication:
  - Dual mode in volume based
  - Incremental
  - Synchronized
- USB device copy to N16000: Controlled through LCM
- Bi-directional USB copy (module): Supported

#### Block Level Access

- iSCSI target: Supports Microsoft/Mac/Linux initiator
- iSCSI initiator: For stacking with N5200/1U4500/1U4600S and R/N5500/N7700/N8800SAS and PRO/N12000/N16000
- iSCSI thin provisioning: Configurable to virtual size 16TB
- MPIO: Supported
- MCS: Supported
- Clustering: Supported
- SCSI3 persistent group reservation: Supported

#### Power management

- Scheduled power on/off: Supported

#### Volume management

- Multiple RAID: Supported
- Multiple file system selectable: EXT3/EXT4/XFS

#### Multimedia Support

- iTunes Server: Supports AAC, MP3 w/ID3 tag and WAV
- Photo Web Server:
  1. Supports GIF, JPG (JPEG), BMP and PNG
  2. Supports EXIF display
  3. Supports slide shows

#### User Authentication

- Local user: Supports built-in user accounts
- Local group: Supports built-in user groups
- Windows ADS: Supported

#### File System

- Type: Journaling File System
- Capacity: 48TB (XFS)/16TB (EXT4)/8TB (EXT3) per volume
- Language support: Unicode Support

- Authorization (ACL): Read, Write, or Deny options on individual users or groups for sharing, sub-folders, and files
- User quota: Supported

#### Administration

- Multi-lingual web-based administration:
    - Web-based server management interface supports English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian, Polish and Portuguese
  - Utility program:
    - MS Windows Setup Wizard, Supports Windows 2000/XP/2003/Vista/7
    - Mac OS X setup Wizard
  - Email notification: Sends system messages via e-mail to system administrator
  - SNMP trap: System information trap out
- #### Others
- Dual DOM: Supported
  - Web disk: Supported
  - Recycling bin: Supported
  - Web server (module): Supported
  - ISO mount: Supported
  - User module: Supported
  - IP cam surveillance (module): Supports up to 10 IP cams
  - HA (High Availability): Supported



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\*Design and specifications are subject to change without prior notice.

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