Thecus®

Subsidiary of **Innoconn**

THE SUPERIOR
ENTERPRISE STORAGE CENTER

10Gb Ethernet for transfer speeds
Over 1150MB/s

(intel) Look Inside.™

N8900PRO
80TB Capacity

N16000PRO
160TB Capacity

N12000PRO
120TB Capacity

CERTIFIED FOR Windows Server®2008 R2

CITRIX® ready™

vmware® READY

VMware ESXi 5.5 Certified

HA

10GbE Ready Fiber/10GBASE-T

SATA III SAS 6G

Cost Effective Daisy Chaining

Acronis

- **HA System Redundancy** with 10GbE aggregation
- **RAID 0 to 60** and JBOD supported
- **Real-time remote replication** and **System Disaster Recovery**
- **AES-NI** instruction set included for improved performance and security
- Massive expansion possible using cost-effective **Daisy-Chaining** with four Thecus® D16000 NAS
- **iSCSI LUN** and **Thin-Provisioning** supported
- Capable of 7 modes of **link aggregation**
- **Bundled with FREE Acronis® and Antivirus**

www.**Thecus**.com

N8900PRO/N12000PRO/N16000PRO
Specifications

Hardware Platform

Processor
- Intel® Xeon® E3-1275 (3.4GHz Quad Core)

System Memory
- 8GB 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)

OLED
- Displays system status and information (Multilingual)

HDMI Output
- HDMI port (back x1)

Audio
- MIC input, Line input, Audio output

10GbE NIC
- Optional x3

Disk Interface
- 8 x SATA/SAS for internal, support SATA II / SATA III hard disk, 1 x eSATA for external (N8900PRO)
- 12 x SATA/SAS for internal, support SATA II / SATA III hard disk, 1 x eSATA for external (N12000PRO)
- 16 x SATA/SAS for internal, support SATA II / SATA III hard disk, 2 x eSATA for external (N16000PRO)

Power Supply
- Redundant power supply 500W or more (80plus) (N8900PRO)
- Redundant power supply 700W or more (80plus) (N12000PRO/N16000PRO)

System Fan
- Hot swappable (x2) (N8900PRO)
- Hot swappable (x4) (N12000PRO/N16000PRO)

Buttons
- Power button (Front, shutdown controlled by user interface)
- LCM button (ENT, ESC, UP, DOWN)
- System reset button
- Locator button

RS232
- 1 (For UPS)

Environment
- Temperature:
  0°C to 40°C (Operation)
  -40°C to 70°C (Non-operation)
- Humidity: 0 ~ 80 % R.H. (Non-condensing)

Chassis
- 2U Rack mount (N8900PRO/N12000PRO)
- 3U Rack mount (N16000PRO)

Dimensions (HxWxD)
- 87 x 438 x 595 (mm)/3.43 x 17.22 x 23.43 (in) (N8900PRO)
- 89 x 440 x 662 (mm)/3.5 x 17.3 x 26.06 (in) (N12000PRO)
- 133 x 440 x 662 (mm)/5.24 x 17.3 x 26.06 (in) (N16000PRO)

Weight
- 16.67 (Kgs)/36.75(lb) (N8900PRO)
- 26.39 (Kgs)/58.18(lb) (N12000PRO)
- 29.38 (Kgs)/64.77(lb) (N16000PRO)

Certificates
- CE/FCC/C-Tick/VCCI/BSMI
- RoHS
- WEEE
- VMware, Citrix

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
- RAID Level Migration: Supported
- RAID Expansion: Supported
- RAID Volume Encryption: AES256bit

Disk
- Power Management: Available spin-down on idle setting
- Bad Block Scanning: Supported
- SMART Info: Supported
- SMART Test: Supported
- Disk Roaming: Supports volume-based roaming to other Thecus NAS (require OS5 64bit)
- Disk Wipe and Clone: Supported

Network
- Configuration: Fixed IP address, dynamic IP address
- Transport Protocols: TCP/IP/AppleTalk
- File Protocols: SMB/CIFS, HTTP/HTTPS, FTP, NFS v4, AFP
- Link Aggregation: Load balance, Failover, 802.3ad, Balance-XOR, Balance-TLB, Balance-ALB, Broadcast
- TCP/IP: IPV6 & IPV4
- DDNS: Supported
- SSH: Supported
- UPnP: Supported
- UPnP Port forwarding: Supported
- Bonjour: Supported
- VPN Server: Supported
- vLan: Supported

System Status
- System Monitor: Monitoring CPU, memory, network utilization and protocols access user count
- Syslog Management:
  1. Send syslog to assigned location
  2. Act as syslog server to receive log info from other systems

Data Access
- Client OS Support:
  Windows XP and after
  Windows Server 2003 and after
  UNIX/Linux
  Mac OS X
- FTP: Built-in FTP server with bandwidth control
- Secure FTP: Built-in secure FTP server with bandwidth control
- TFTP: Users can download and upload files with TFTP programs
- Download Manager:
  BT download (via Transmission Module)
  NZB download (via NZB Module)

- WebDAV/WebDAV SSL: Supported
- Printer Server (IPP):
  1. Supports USB printers
  2. Supports a wide range of IPP printers
  3. Client can manage print tasks (list/delete) via web user interface

Data Backup
- Client Incremental Data Backup & Client System Disaster Recovery (N8900PRO): Acronis True Image (OEM version)
- Client Incremental Data Backup & Client System Disaster Recovery (N12000PRO/N16000PRO): Acronis Backup and Recovery Server OEM for Windows (license x5)
- Data Burn:
  1. Create files to ISO image and burn to optical disc
  2. Create files to ISO image
  3. Read ISO image from optical disc and write to NAS
- Mac OS X Time Machine: Supported
- Data Guard: Remote Backup/Local Backup/Folder and iSCSI volume based
- Snapshot: Supported (Btrfs)
- High Availability: Supported

Block Level Access
- iSCSI Target/Initiator: Supports Microsoft/Mac OS X/Linux initiators and Thecus NAS targets
- iSCSI Thin Provisioning: Supported
- 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/Btrfs

Multimedia Support
- iTunes Server: Supports AAC, MP3 w/ID3 tag and WAV
- Piczza!™ Photo Server (via module):
  1. Supports GIF, JPG (JPEG), BMP and PNG
  2. Supports EXIF display
  3. Supports slide show
- Media Server:
  Supports uPnP AV streaming protocol (via module)

User Authentication
- Local User: Supports built-in user accounts
- Local Group: Supports built-in user groups
- Windows ADS: Supported
- LDAP: Supported
- Access Guard: Supports Black & White list/IP Filter

Cloud Backup
- DropBox: Supported (via module)
- ElephantDriver: Supported (via module)
- Amazon S3: Supported

File System
- Type: Journaling File System
- Language Support: Unicode Support
- Authorization (ACL): "Read", "write", or "deny" privileges to individual users or groups in folders and sub-folders
- User Quota: Supported (exclude btrfs)
- Folder Quota: Supported (Btrfs only)

Administration
- User Interface: Web-based user interface supports English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian, Polish, Portuguese, Turkish and Czech
- Utility Program:
  MS Windows Setup Wizard
  Supports Windows XP and after
  Mac OS X Setup Wizard
- Email Notifications: Sends system messages via email to the system administrator
- SNMP Trap: System information trap out

Mobile Applications (iOS/Android)
- T-OnTheGo™: Upload, download and stream multimedia
- Orbweb.me: Uploading, downloading, streaming multimedia and webcam via P2P connection

Data Security
- Antivirus: Supported (via module)

Capacity Expansion
- Stackable: Can extend for 5 additional iSCSI volumes from other Thecus NAS
- Daisy Chain: Allowed to daisy chain to an additional 4 sets of Thecus D16000
- Expand through SAS wide port Interface:
  1. Can be configured as multi-independent RAID volume
  2. Can join to existed RAID volume

Others
- Dual DOM Supported
- Recycling Bin: Supported
- Web Disk: Supported (via module)
- Web Server: Supported (via module)
- ISO Mount: Supported
- User Access Log: Supported
- User/System Module: Supported
- IP Cam Surveillance:
  Supports up to 10 IP cameras (via module)
- Auto Module Installation: Thecus' module server automatically provides the latest modules and updates through the user interface
- UPS: Supported through USB interface
- Local Display: X-Window via HDMI output

Retail/Reseller Information