

Specifications

CPU

CPU Model Marvell Armada 385 88F6820

CPU Architecture 32-bit

CPU Frequency Dual Core 1.3 GHz

Hardware Encryption Engine

Memory

System Memory 512 MB DDR3

Storage

Drive Bays 2

Compatible Drive Type* ([See all supported drives](#))

- 3.5" SATA HDD
- 2.5" SATA HDD (with optional 2.5" Disk Holder)
- 2.5" SATA SSD (with optional 2.5" Disk Holder)

Maximum Internal Raw Capacity 24 TB (12 TB drive x 2) (Capacity may vary by RAID types)

Maximum Single Volume Size 16 TB

Notes

- "Compatible drive type" indicates the drives that have been tested to be compatible with Synology products. This term does not indicate the maximum connection speed of each drive bay.
- The maximum raw capacity is not limited by the maximum single volume size. Synology NAS models may utilize capacities over the maximum single volume size as long as each volume created is below the limit. ([Learn more](#))

External Ports

RJ-45 1GbE LAN Port 1

USB 3.0 Port 2

File System

Internal Drives EXT4

External Drives

- EXT4
- EXT3
- FAT
- NTFS
- HFS+*
- exFAT*

- Notes
- HFS+ is read only, max 2TB volume size.
 - exFAT Access is purchased separately in Package Center.

Appearance

Size (Height x Width x Depth) 165 mm x 100 mm x 225.5 mm

Weight 0.88 kg

Others

System Fan 92 mm x 92 mm x 1 pcs

- Full-Speed Mode
 - Cool Mode
- Fan Speed Mode
- Quiet Mode
 - Low-power Mode

Brightness adjustable front LED indicators

Power Recovery

Noise Level* 18.2 dB(A)

Scheduled Power On/Off

Wake on LAN/WAN

Power Supply Unit / Adapter 60W

AC Input Power Voltage 100V to 240V AC

Power Frequency 50/60 Hz, Single Phase

Power Consumption* 17.48 W (Access)
7.03 W (HDD Hibernation)

British Thermal Unit 59.68 BTU/hr (Access)
24 BTU/hr (HDD Hibernation)

Environment Temperature

Operating Temperature 5°C to 40°C (40°F to 104°F)

Storage Temperature -20°C to 60°C (-5°F to 140°F)

Relative Humidity 5% to 95% RH

- Certification
- EAC
 - CCC
 - RCM
 - KC
 - FCC
 - CE

- BSMI

Warranty	2 Years
Notes	<ul style="list-style-type: none"> • Power consumption is measured when fully loaded with Western Digital 1TB WD10EFRX hard drive(s). • Noise Level Testing Environment: Fully loaded with Seagate 2TB ST2000VN000 hard drive(s) in idle; Two G.R.A.S. Type 40AE microphones, each set up at 1 meter away from the Synology NAS front and rear; Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8%

DSM Specifications ([See more](#))

Storage Management

Maximum Internal Volume Number 256

Maximum iSCSI Target Number 10

Maximum iSCSI LUN 10

Supported RAID Type

- Synology Hybrid RAID
- Basic
- JBOD
- RAID 0
- RAID 1

RAID Migration Basic to RAID 1

Volume Expansion with Larger HDDs

- Synology Hybrid RAID
- RAID 1

Volume Expansion by Adding a HDD Synology Hybrid RAID

File Sharing Capacity

Maximum Local User Accounts 1024

Maximum Local Groups 256

Maximum Shared Folder 256

Maximum Shared Folder Sync Tasks 2

Maximum Concurrent
CIFS/AFP/FTP Connections 100

Windows Access
Control List (ACL)

Integration

NFS Kerberos
Authentication

Log Center

Syslog Events per
Second 100

Add-on Packages ([learn more about the complete add-on package list](#))

Chat

Maximum Users 10

- The number of concurrent HTTP connections for Chat was configured to the maximum.

Notes

- CPU and RAM usage were both under 80% when the number of maximum users was reached.

Cloud Station Server

Maximum Number of
Concurrently Connected Devices 100

Maximum Number of
Synced Files (ext4) 100,000 / single file reaction time 840 ms

- The maximum number of concurrently connected devices refers to the maximum number of devices that can remain connected at the same time. For more information on file processing capability, please refer to the reaction time for file processing.
- File reaction time refers to the preparation time required for other devices to start downloading a 10KByte file from a Synology NAS after the file has been added to the NAS. RAM expansion was not used during testing.
- Non-encrypted shared folders were used during the aforementioned testing.

Notes

Download Station

Maximum Concurrent
Download Tasks 30

Drive

Maximum Number of
Synced Files 100,000 / single file reaction time 941 ms

Maximum Number of
Concurrent
Connections for PC
Clients 200

- The EXT4 file system was used for the purpose of testing.
- The maximum number of concurrent connections refers to the maximum number of connections that could be maintained when the maximum number of synced files was reached.
- File reaction time refers to the preparation time required for other devices to start downloading a 10KByte file from a Synology NAS after the file has been added to the NAS.
- Non-encrypted shared folders were used during the aforementioned testing.

Notes

exFAT Access
(optional)
Media Server
DLNA Compliance
Moments
Facial recognition
Subject recognition
Office
Maximum Users 200

- Multiple files were opened for testing and each file was edited by 30 users simultaneously.
- CPU and RAM usage were both under 80% when the number of maximum users was reached.
- Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

Notes

Surveillance Station
Maximum IP cam
(Licenses required)

14 (including 2 Free License) ([See All Supported IP Cameras](#))

Total FPS (H.264)*

420 FPS @ 720p (1280x720)
120 FPS @ 1080p (1920x1080)
90 FPS @ 3M (2048x1536)
60 FPS @ 5M (2591x1944)
20 FPS @ 4K (3840x2160)

Total FPS (H.265)*

420 FPS @ 720p (1280x720)
210 FPS @ 1080p (1920x1080)
140 FPS @ 3M (2048x1536)

Total FPS (MJPEG)*
90 FPS @ 5M (2591x1944)
30 FPS @ 4K (3840x2160)
140 FPS @ 720p (1280x720)
70 FPS @ 1080p (1920x1080)
40 FPS @ 3M (2048x1536)
20 FPS @ 5M (2591x1944)

Notes
Surveillance Station throughput is tested with Axis network camera, using continuous recording with live view from Surveillance Station and motion detection by camera. Live view and recording are sharing the same stream from the camera.

Video Station

Video Transcoding Group 2 ([See more](#))

VPN Server

Maximum
Connections 5

Environment & Packaging

Environment RoHS Compliant

Packaging Content

- Main Unit X 1
- Accessory Pack X 1
- AC Power Adapter X 1
- AC Power Cord X 1
- RJ-45 LAN Cable X 1
- Quick Installation Guide X 1

Optional Accessories

- Surveillance Device License Pack
- Disk Holder: Type C
- VS360HD
- VS960HD