

		Plus Series					
		RS2821RP+	RS2421+/RS2421RP+	RS1221+/RS1221RP+	RS820+/RS820RP+	DS2419+	DS1821+
Network-Attached Storage							
Performance ⁽¹⁾		Read: 2200.19 MB/s Write: 1164.31 MB/s	Read: 2200.36 MB/s Write: 1153.79 MB/s	Read: 2315.07 MB/s Write: 1147.68 MB/s	Read: 413.48 MB/s Write: 418.20 MB/s	Read: 1737.10 MB/s Write: 706.79 MB/s	Read: 2312.97 MB/s Write: 1149.89 MB/s
Processor		AMD® Ryzen® V-1500B Quad-core, 2.2 GHz	AMD® Ryzen® V-1500B Quad-core, 2.2 GHz	AMD® Ryzen® V-1500B Quad-core, 2.2 GHz	Intel® Atom® C-3538 Quad-core, 2.1 GHz	Intel® Atom® C-3538 Quad-core, 2.1 GHz	AMD® Ryzen® V-1500B Quad-core, 2.2 GHz
RAM		4 GB DDR4 - Up to 32 GB ECC ⁽¹⁵⁾	4 GB DDR4 - Up to 32 GB ECC ⁽¹⁵⁾	4 GB DDR4	2 GB DDR4 - Up to 18 GB ⁽¹⁵⁾⁽¹⁶⁾	4 GB DDR4 - Up to 32 GB ⁽¹⁶⁾	4 GB DDR4 - Up to 32 GB
Compatible Drive Type ⁽²⁾		SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF
Internal / Maximum Drive Bays ⁽³⁾		16 / 28 ⁽¹²⁾	12 / 24 ⁽¹²⁾	8 / 12 ⁽¹⁷⁾	4 / 8 ⁽¹⁷⁾	12 / 24 ⁽¹⁸⁾	8 / 18 ⁽¹⁴⁾
Dedicated SSD Cache Slots		-	-	-	-	-	2 x M.2 2280 NVMe
External Device Interface		2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1 1 x Expansion port	4 x USB 3.2 Gen 1 2 x Expansion ports
PCIe Slots ⁽⁴⁾		1 x Gen 3 x8 (x4 link)	1 x Gen 3 x8 (x4 link)	1 x Gen 3 x8 (x4 link)	1 x Gen 3 x8 (x4 link)	1 x Gen 3 x8 (x4 link)	1 x Gen 3 x8 (x4 link)
Networking		4 x 1GbE	4 x 1GbE	4 x 1GbE	4 x 1GbE	4 x 1GbE	4 x 1GbE
File System - Internal Drives		Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4
File Protocols		SMB, AFP, NFS, iSCSI, WebDAV, FTP			SMB, AFP, NFS, iSCSI, WebDAV, FTP		
Supported RAID Type		Basic, JBOD, RAID 0/1/5/6/10, Synology RAID F1			Basic, JBOD, RAID 0/1/5/6/10, Synology RAID F1		
File Sharing Max. User Accounts		2048	2048	2048	2048	2048	2048
File Sharing Max. Concurrent Connections (SMB, FTP, AFP)		1000	1000	1000	500	1000	1000
Synology Surveillance Station	Max. IP Cameras ⁽⁵⁾	40	40	40	40	40	40
	Total Frames Per Second (H.264)	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p
Synology Productivity Suite	Max. Synology MailPlus Client Number	Up to 150	Up to 150	Up to 150	Up to 150	Up to 150	Up to 150
	Max. Synology Office Users	1800	1800	1800	1800	1800	1800
Power Consumption ⁽⁶⁾	Access	97.54 W	RS2418+: 79.56 W; RS2418RP+: 91.76 W	RS1221+: 61.94 W; RS1221RP+: 61.94 W	RS820+: 37.94 W; RS820RP+: 38.88 W	101.6 W	59.8 W
	HDD Hibernation	49.57 W	RS2418+: 34.89 W; RS2418RP+: 48.21 W	RS1221+: 29.98 W; RS1221RP+: 29.98 W	RS820+: 20.96 W; RS820RP+: 22.17 W	43.96 W	26.18 W
Physical	Dimensions (H x W x D)	132.3 x 482 x 656.5 mm	RS2418+: 88 x 482 x 552 mm RS2418RP+: 88 x 482 x 578 mm	RS1221+: 88 x 482 x 306.6 mm RS1221RP+: 88 x 482 x 407.5 mm	RS820+: 44 x 480 x 492.6 mm RS820RP+: 44 x 480 x 518.6 mm	270 x 300 x 340 mm	166 x 343 x 243 mm
	Weight	17.1 kg	RS2418+: 11.5 kg; RS2418RP+: 11.9 kg	RS1221+: 6.9 kg; RS1221RP+: 8.4 kg	RS820+: 6.4 kg; RS820RP+: 7.96 kg	9.5 kg	6.0 kg
Warranty		3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾

		Plus Series						
		DS1621+	DS1520+	DS920+	DS720+	DS420+	DS220+	DS620slim
Network-Attached Storage								
Performance ⁽¹⁾		Read: 2317.02 MB/s Write: 1127.99 MB/s	Read: 451.28 MB/s Write: 451.18 MB/s	Read: 225.99 MB/s Write: 225.90 MB/s	Read: 225.99 MB/s Write: 195.42 MB/s	Read: 226.00 MB/s Write: 225.74 MB/s	Read: 225.98 MB/s Write: 192.21 MB/s	Read: 225.97 MB/s Write: 225.14 MB/s
Processor		AMD® Ryzen® V-1500B Quad-core, 2.2 GHz	Intel® Celeron® J-4125 Quad-core, up to 2.7 GHz	Intel® Celeron® J-4125 Quad-core, up to 2.7 GHz	Intel® Celeron® J-4125 Quad-core, up to 2.7 GHz	Intel® Celeron® J-4025 Dual-core, up to 2.90 GHz	Intel® Celeron® J-4025 Dual-core, up to 2.90 GHz	Intel® Celeron® J-3355 Dual-core, up to 2.50 GHz
RAM		4 GB DDR4 - Up to 32 GB	8 GB DDR4	4 GB DDR4 - Up to 8 GB	2 GB DDR4 - Up to 6 GB	2 GB DDR4 - Up to 6 GB	2 GB DDR4 - Up to 6 GB	2 GB DDR4 - Up to 6 GB
Compatible Drive Type ⁽²⁾		SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA SFF
Internal / Maximum Drive Bays ⁽³⁾		6 / 16 ⁽¹⁴⁾	5 / 15 ⁽¹⁴⁾	4 / 9 ⁽²⁰⁾	2 / 7 ⁽²⁰⁾	4	2	6
Dedicated SSD Cache Slots		2 x M.2 2280 NVMe	2 x M.2 2280 NVMe	2 x M.2 2280 NVMe	2 x M.2 2280 NVMe	2 x M.2 2280 NVMe	-	-
External Device Interface		3 x USB 3.2 Gen 1 2 x Expansion ports	2 x USB 3.2 Gen 1 2 x Expansion ports	2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1
PCIe Slots ⁽⁴⁾		1 x Gen 3 x8 (x4 link)	-	-	-	-	-	-
Networking		4 x 1GbE	4 x 1GbE	2 x 1GbE	2 x 1GbE	2 x 1GbE	2 x 1GbE	2 x 1GbE
File System - Internal Drives		Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4	Btrfs, ext4
File Protocols		SMB, AFP, NFS, iSCSI, WebDAV, FTP				SMB, AFP, NFS, iSCSI, WebDAV, FTP		
Supported RAID Type		Basic, JBOD, RAID 0/1/5/6/10, SHR				Basic, JBOD, RAID 0/1/5/6/10, SHR ⁽²¹⁾		
File Sharing Max. User Accounts		2048	2048	2048	2048	2048	2048	2048
File Sharing Max. Concurrent Connections (SMB, FTP, AFP)		1000	2000	1000	500	500	500	500
Synology Surveillance Station	Max. IP Cameras ⁽⁵⁾	40	40	40	40	25	25	25
	Total Frames Per Second (H.264)	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p	1200 FPS at 720p	750 FPS at 720p	750 FPS at 720p	750 FPS at 720p
Synology Productivity Suite	Max. Synology MailPlus Client Number	Up to 150	Up to 100	Up to 100	Up to 100	Up to 50	Up to 50	Up to 50
	Max. Synology Office Users	1800	1200	1200	1200	600	600	400
Power Consumption ⁽⁶⁾	Access	51.22 W	36.67 W	32.17 W	16.44 W	28.30 W	14.69 W	34.88 W
	HDD Hibernation	25.27 W	15.51 W	9.69 W	6.19 W	8.45 W	4.41 W	7.59 W
Physical	Dimensions (H x W x D)	166 x 282 x 243 mm	166 x 230 x 223 mm	166 x 199 x 223 mm	166 x 106 x 223 mm	166 x 199 x 223 mm	165 x 108 x 232.2 mm	121 x 151 x 175 mm
	Weight	5.1 kg	2.62 kg	2.24 kg	1.51 kg	2.18 kg	1.3 kg	1.4 kg
Warranty		3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	3 years ⁽¹⁹⁾	2 years	2 years

Network-Attached Storage

		Value Series						
		RS819	RS217	DS1817	DS418	DS218	DS218play	DS118
Network-Attached Storage								
Performance ⁽¹⁾		Read: 225.66 MB/s Write: 169.27 MB/s	Read: 225.30 MB/s Write: 172.15 MB/s	Read: 1840.66 MB/s Write: 761.58 MB/s	Read: 225.81 MB/s Write: 160.66 MB/s	Read: 112.94 MB/s Write: 112.96 MB/s	Read: 112.97 MB/s Write: 112.31 MB/s	Read: 112.92 MB/s Write: 112.88 MB/s
Processor		Realtek® RTD-1296 Quad-core, 1.4 GHz	Marvell® 6820 Dual-core, 1.33 GHz	Annapurna® AL-314 Quad-core, 1.7 GHz	Realtek® RTD1296 Quad-core, 1.4 GHz	Realtek® RTD1296 Quad-core, 1.4 GHz	Realtek® RTD1296 Quad-core, 1.4 GHz	Realtek® RTD1296 Quad-core, 1.4 GHz
RAM		2 GB DDR4	512 MB DDR3	4 GB DDR3L - Up to 8 GB	2 GB DDR4	2 GB DDR4	1 GB DDR4	1 GB DDR4
Compatible Drive Type ⁽²⁾		SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF
Internal / Maximum Drive Bays ⁽³⁾		4 / 8 ⁽¹⁷⁾	2	8 / 18 ⁽¹⁴⁾	4	2	2	1
Dedicated SSD Cache Slots		-	-	-	-	-	-	-
External Device Interface		2 x USB 3.2 Gen 1 1 x Expansion port	2 x USB 3.2 Gen1 1 x USB 2.0 1 x Expansion port	2 x USB 3.2 Gen 1 2 x Expansion ports	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1 1 x USB 2.0	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1
PCIe Slots ⁽⁴⁾		-	-	-	-	-	-	-
Networking		2 x 1GbE	2 x 1GbE	2 x 1GbE, 2 x 10GbE	2 x 1GbE	1 x 1GbE	1 x 1GbE	1 x 1GbE
File System - Internal Drives		Btrfs, ext4	ext4	ext4	Btrfs, ext4	Btrfs, ext4	ext4	ext4
File Protocols		SMB, AFP, NFS, iSCSI, WebDAV, FTP				SMB, AFP, NFS, iSCSI, WebDAV, FTP		
Supported RAID Type		Basic, JBOD, RAID 0/1/5/6/10, SHR	Basic, JBOD, RAID 0/1, SHR	Basic, JBOD, RAID 0/1/5/6/10, SHR	Basic, JBOD, RAID 0/1/5/6/10, SHR	Basic, JBOD, RAID 0/1, SHR		Basic
File Sharing Max. User Accounts		2048	2048	2048	2048	2048	2048	2048
File Sharing Max. Concurrent Connections (SMB, FTP, AFP)		200	128	1024	200	200	200	200
Synology Surveillance Station	Max. IP Cameras ⁽⁵⁾	30	16	30	30	20	15	15
	Total Frames Per Second (H.264)	900 FPS at 720p	480 FPS at 720p	900 FPS at 720p	900 FPS at 720p	600 FPS at 720p	450 FPS at 720p	450 FPS at 720p
Synology Productivity Suite	Max. Synology MailPlus Client Number	-	-	-	-	-	-	-
	Max. Synology Office Users	200	200	400	200	200	200	200
Power Consumption ⁽⁶⁾	Access	28.31 W	21.25 W	59.1 W	26.49 W	14.99 W	16.79 W	9.4 W
	HDD Hibernation	10.1 W	12.9 W	26.4 W	8.78 W	5.78 W	5.16 W	4.22 W
Physical	Dimensions (H x W x D)	44 x 478 x 327.5 mm	44 x 479.4 x 295.5 mm	157 x 340 x 233 mm	166 x 199 x 233 mm	165 x 108 x 233.2 mm	165 x 100 x 225.5 mm	166 x 71 x 224 mm
	Weight	4.34 kg	3.46 kg	5.31 kg	2.28 kg	1.3 kg	0.87 kg	0.7 kg
Warranty		3 years ⁽¹⁹⁾	3 years	3 years ⁽¹⁹⁾	2 years	2 years	2 years	2 years

Network-Attached Storage

		J Series		
		DS420j	DS220j	DS120j
Network-Attached Storage				
Performance ⁽¹⁾		Read: 112.96 MB/s Write: 112.69 MB/s	Read: 112.95 MB/s Write: 112.93 MB/s	Read: 112.69 MB/s Write: 106.99 MB/s
Processor		Realtek® RTD1296 Quad-core, 1.4 GHz	Realtek® RTD1296 Quad-core, 1.4 GHz	Marvell® A3720 Dual-core, 800MHz
RAM		1 GB DDR4	512 MB DDR4	512 MB DDR3
Compatible Drive Type ⁽²⁾		SATA LFF/SFF	SATA LFF/SFF	SATA LFF/SFF
Internal / Maximum Drive Bays ⁽³⁾		4	2	1
Dedicated SSD Cache Slots		-	-	-
External Device Interface		2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1	2 x USB 2.0
PCIe Slots ⁽⁴⁾		-	-	-
Networking		1 x 1GbE	1 x 1GbE	1 x 1GbE
File System - Internal Drives		ext4	ext4	ext4
File Protocols		SMB, AFP, NFS, iSCSI, WebDAV, FTP		
Supported RAID Type		Basic, JBOD, RAID 0/1/5/6/10, SHR	Basic, JBOD, RAID 0/1, SHR	Basic
File Sharing Max. User Accounts		1024	1024	512
File Sharing Max. Concurrent Connections (SMB, FTP, AFP)		100	100	50
Synology Surveillance Station	Max. IP Cameras ⁽⁵⁾	16	12	5
	Total Frames Per Second (H.264)	480 FPS at 720p	360 FPS at 720p	150 FPS at 720p
Synology Productivity Suite	Max. Synology MailPlus Client Number	-	-	-
	Max. Synology Office Users	200	200	-
Power Consumption ⁽⁶⁾	Access	21.71 W	12.46 W	9.81 W
	HDD Hibernation	7.88 W	5.06 W	4.68 W
Physical	Dimensions (H x W x D)	184 x 168 x 230 mm	165 x 100 x 225.5 mm	166 x 71 x 224 mm
	Weight	2.21 kg	0.88 kg	0.7 kg
Warranty		2 years	2 years	2 years

Network-Attached Storage

Network Video Recorder		
DVA3221		NVR1218
		
Dedicated Accelerator	NVIDIA GeForce® GTX 1650	
Processor	Intel® C3538 Quad-core, 2.1 GHz	
RAM	8 GB DDR4 - Up to 32 GB	
Compatible Drive Type ⁽²⁾	SATA LFF/SFF	
Internal / Maximum Drive Bays ⁽³⁾	4 / 14	
Dedicated SSD Cache Slots	-	
External Device Interface	3 x USB 3.2 Gen 1; 2 x Expansion ports; 1 x COM port	
PCIe Slots ⁽⁴⁾	-	
Networking	4 x 1GbE	
File System - Internal Drives	Btrfs, ext4	
File Protocols	SMB, AFP, NFS, iSCSI, WebDAV, FTP	
Supported RAID Type	Basic, JBOD, RAID 0/1/5/6/10, SHR	
File Sharing Max. User Accounts	2048	
File Sharing Max. Concurrent Connections (SMB, FTP, AFP)	2000	
Synology Surveillance Station	Max. IP Cameras ⁽⁵⁾	32
	Total Frames Per Second (H.264)	960 FPS at 720p
	Max. Synology MailPlus Client Number	People and vehicle detection, People counting, Face recognition, Intrusion detection
	Max. Synology Office Users	6
Power Consumption ⁽⁶⁾	Access	43.92 W
	HDD Hibernation	28.43 W
Physical	Dimensions (H x W x D)	166 x 250 x 237 mm
	Weight	4.92 kg
Warranty	3 years ⁽¹⁹⁾	

		FX2421	RXD1219sas	RX2417sas	RX1217sas	RX1217/RX1217RP	RX418	DX1215	DX517
Expansion unit									
Compatible Drive Type		SAS/SATA SFF	SAS LFF/ SFF	SAS/SATA SFF	SAS/SATA LFF/ SFF	SATA LFF/ SFF	SATA LFF/ SFF	SATA LFF/ SFF	SATA LFF/ SFF
Internal / Maximum Drive Bays ⁽³⁾		24	12	24	12	12	4	12	5
Power Consumption ⁽⁶⁾	Access	190.99 W	299.79 W	201.6 W	132.7 W	RX1217: 68.6 W RX1217RP: 71.32 W	23.26 W	51.23 W	29.9 W
	HDD Hibernation	80.97 W	-	117.2 W	89.3 W	RX1217: 27.45 W RX1217RP: 31.2 W	6.39 W	21.71 W	2.4 W
Volume Type		RAID Management through Synology servers					RAID Management through Synology servers		
Physical	Dimensions (H x W x D)	88 x 482 x 724 mm	88 x 482 x 724 mm	88 x 482 x 724 mm	88 x 482 x 724 mm	RX1217: 88 x 482 x 696 mm RX1217RP: 88 x 482 x 724 mm	44 x 480 x 325 mm	270 x 300 x 340 mm	157 x 248 x 233 mm
	Weight	14.5 kg	18.2 kg	16.6 kg	18 kg	RX1217: 12.7 kg RX1217RP: 13.4 kg	4.28 kg	9.02 kg	3.91 kg
Warranty		5 years	5 years	5 years	5 years	5 years	3 years ⁽¹⁹⁾	5 years	3 years

RT2600ac		MR2200ac	
			
CPU Frequency		Dual-core 1.7 GHz	Quad-core 717 MHz
RAM		512 MB DDR3L	256 MB DDR3L
Layer 4 & 7 Traffic Control Hardware Acceleration		Yes	-
Wi-Fi Connectivity	IEEE 802.11ac	IEEE 802.11a/b/g/-c Simultaneous dual-band AC2600 (800Mbps + 1.73Gbps)	IEEE 802.11a/b/g/-c Simultaneous tri-band AC2200 (400 + 867 +867Mbps)
	MU-MIMO Beamforming	Yes	Yes
Wi-Fi Security		64/128-bit WEP, WPA/WPA2-Personal/Enterprise, WPA2/ WPA3-Personal, WPA3-Personal/Enterprise, OWE	
Roaming		802.11k/v/r support	802.11k/v/r support
Max. Connected Devices ⁽²²⁾		100	90
Recommended Max. Number of Wi-Fi Points		1 Primary + 6 Wi-Fi points ⁽²³⁾ 1 Primary + 12 Wi-Fi points ⁽²⁴⁾	
Networking	LAN	4 x 1GbE 3 x 1GbE (Dual WAN mode)	1 x 1GbE
	WAN	1 x 1GbE 2 x 1GbE (Dual WAN mode)	1 x 1GbE
External Device Interface		1 x USB 3.2 Gen 1 1 x USB 2.0 1 x SD Card	1 x USB 3.2 Gen 1
Power Consumption ⁽⁶⁾	Access	10.80 W	12.95 W
	HDD Hibernation	7.94 W	5.21 W
Physical	Dimensions (H x W x D)	77 x 280 x 169 mm (without antenna)	154 x 199 x 65 mm
	Weight	0.695 kg	0.45 kg
Warranty		2 years	2 years

		VS960HD	VS360HD
PC-less surveillance			
External Device Interface		1 x USB 3.2 Gen 1 2 x USB 2.0	1 x USB 3.2 Gen 1 2 x USB 2.0
LAN		1 x 1GbE	1 x 1GbE
Video Output		2 x HDMI	1 x HDMI, 1 x VGA
Audio Input/Output		2 x 3.5 mm Stereo Audio Jack	32 x 130 x 130 mm
Supported Video Resolution		HDMI 1: 3840 x 2160, 30Hz/60 Hz; HDMI 2: 1920 x 1080, 60 Hz	1920 x 1080, 60 Hz
Max. Channel Number		96 (960 FPS at 720p)	36 (360 FPS at 720p)
Video Compression Format		MJPEG, MPEG-4, H.264, H.265	MJPEG, MPEG-4, H.264
Audio Codec		PCM, G711, G726, AMR, AAC	PCM, G711, G726, AMR, AAC, ADPCM
Power Consumption		7.2 W (96ch full-load)	4.76 W (36ch full-load)
Operating Temperature		-20°C to 50°C	-20°C to 50°C
Physical	Dimensions (H x W x D)	32 x 130 x 130 mm	32 x 130 x 130 mm
	Weight	0.38 kg	0.3 kg
Warranty		3 years ⁽¹⁹⁾	3 years

Note: Model specifications are subject to change without advance notice. Please refer to www.synology.com for the latest information.

(1) Sequential (64KB) transfer performance. Tested using Link Aggregation and Btrfs file system. Actual performance may vary depending on workload, test equipment, and configuration. Please visit www.synology.com/products/performance for more information.

(2) "Compatible Drive Type" represents the bus interface of the drives that are supported by the device. Actual compatibility depends on each model's compatibility list.

(3) Drives not included. Check our [compatibility list](#) for supported drives.

(4) Please visit www.synology.com for the most up-to-date information on lane count, slot width, and supported add-in cards.

(5) Device licenses govern the amount of cameras that can be used. Each device comes with two device licenses with additional licenses available for purchase.

(6) Power consumption will vary according to drive models installed and any additional add-in-cards or upgrades. The provided values are for reference only.

(7) Compatible with up to 2 x RX1217sas or 2 x FX2421.

(8) Compatible with up to 7 x RX1217sas or 7 x RX2417sas

(9) Compatible with up to 2 x RXD1219sas.

(10) Only drives listed on the compatibility list can be used to create storage pools. Check our [compatibility list](#) for supported drives.

(11) Compatible with up to 2 x RX1217/RX1217RP.

(12) Compatible with up to 1 x RX1217/RX1217RP.

(13) Compatible with up to 2 x DX1215.

(14) Compatible with up to 2 x DX517.

(15) The unit supports ECC memory, but ships with non-ECC memory. For details on supported memory, see the datasheet for that unit.

(16) Global Hot Spare supported only with an expansion unit connected.

(17) Compatible with up to 1 x RX418.

(18) Compatible with up to 1 x DX1215.

(19) Extended warranty options available for up to 5 years. See [sy.to/ew](#) for more information.

(20) Compatible with up to 1 x DX517

(21) Supports RAID 5/6/10 and Global Hot Spare only when a DX517 expansion unit is connected.

(22) Based on Synology internal testing, the RT2600ac supports at least 100 clients concurrently transmitting data. More clients are supported, but the performance of the connected devices will vary depending on the network environment, client bandwidth demands, and settings.

(23) In an all-wireless uplink connection environment.

(24) In an all-wired uplink connection environment.

(25) Requires being paired with a Synology NVR or Synology NAS.

		SNV3400-400G		SNV3500-400G		SNV3400-800G		SNV3500-800G		SAT5200 - 480G		SAT5200-960G		SAT5200-1920G		SAT5200-3840G		
Accessories																		
Capacity		400 GB				800 GB				480 GB		960 GB		1.92 TB		3.84 TB		
Form factor		M.2 2280		M.2 22110		M.2 2280		M.2 22110		2.5" 7mm								
Interface		NVMe PCIe 3.0 x4										SATA 6 Gb/s						
Performace	Sequential read (128 KB, QD32) ⁽¹⁾	3,100 MB/s										530 MB/s						
	Sequential write (128 KB, QD32) ⁽¹⁾	550 MB/s				1,000 MB/s				500 MB/s								
	Random read (4 KB, QD256) ⁽¹⁾	205,000 IOPS				375,000 IOPS				95,000 IOPS		98,000 IOPS						
	Random write (4 KB, QD256) ⁽¹⁾	40,000 IOPS				70,000 IOPS				55,000 IOPS		67,000 IOPS		60,000 IOPS		58,000 IOPS		
Endurance and Reliability	Terabytes Written (TBW) ⁽²⁾	500 TB				988 TB				1,145 TB		2,290 TB		4,581 TB		9,162 TB		
	Drive Writes Per Day (DWPD)	0.68										1.3						
	Mean Time Between Failures (MTBF)	1.8 million hours										1.5 million hours						
	Uncorrectable Bit Error Rates (UBER)	< 1 sector per 10 ¹⁷ bits read										< 1 sector per 10 ¹⁷ bits read						
	Power loss protection	-		Yes ⁽³⁾		-		Yes ⁽³⁾		Yes								
	Warranty ⁽⁴⁾	5 years										5 years						
Power Consumption	Supply voltage	3.3 V (± 5%)										5 V (± 5%)						
	Active read (Typ.)	3.2 W		3.7 W		4.5 W		5.0 W		2.6 W		2.9 W		3.1 W		3.6 W		
	Active write (Typ.)	3.2 W		3.4 W		4.5 W		5.1 W		4.2 W		4.6 W		5.1 W		6.2 W		
	Idle	2.0 W										1.4 W		1.5 W		1.6 W		1.9 W
Temperature	Operation temperature	0°C to 70°C (32°F to 158°F)										0°C to 70°C (32°F to 158°F)						
	Storage temperature	-40°C to 85°C (-40°F to 185°F)										-40°C to 85°C (-40°F to 185°F)						
Others	Dimension (H x W x D)	3.5 mm x 22 mm x 80 mm		4.5 mm x 22 mm x 110 mm		3.5 mm x 22 mm x 80 mm		4.5 mm x 22 mm x 110 mm		7.0 mm x 69.85 mm x 100 mm								
	Environment	-										RoHS Compliant						
	Certification	FCC, CE, EAC, BSMI, VCCI, RCM, KC, RoHS										CE, FCC, VCCI, RCM, BSMI, KC, EAC						

Note: Model specifications are subject to change without advance notice. Please refer to www.synology.com for the latest information.

- (1) Performance measured using FIO on Linux with Queue Depth 32/256 (128 KB = 131,072 bytes; 4 KB = 4,096 bytes).
- (2) The endurance rating is calculated based on JESD219A enterprise workload.
- (3) Power loss protection circuit design is available on SNV3500 to further prevent data corruption in case of power failure.
- (4) 5-year limited warranty provides coverage until the end of the warranty period or until the endurance usage of the drive has been reached, whichever comes first.

			HAT5300-8T(1)		HAT5300-12T(1)		HAT5300-16T(1)		HAS5300-8T		HAS5300-12T		HAS5300-16T		
Accessories															
Capacity ⁽²⁾			8 TB		12 TB		16 TB		8 TB		12 TB		16 TB		
Form Factor ⁽³⁾					3.5"				3.5"						
Interface					SATA 6 Gb/s						SAS 12 Gb/s				
Sector size					512e						512e				
Performance	Rotational speed				7,200 rpm						7,200 rpm				
	Interface speed				6.0 Gb/s, 3.0 Gb/s, 1.5 Gb/s						12.0 Gb/s, 6.0 Gb/s, 3.0 Gb/s, 1.5 Gb/s				
	Buffer size ⁽⁴⁾		256 MiB				512 MiB				256 MiB		512 MiB		
	Maximum sustained data transfer speed (Typ.)		230 MiB/s		242 MiB/s				262 MiB/s				230 MiB/s		242 MiB/s
Reliability	Mean Time to Failure (MTTF) ⁽⁵⁾				2,500,000 hours						2,500,000 hours				
	Workload rating ⁽⁶⁾				550 Total TB Transferred per Year						550 Total TB Transferred per Year				
	Warranty ⁽⁷⁾				5 years						5 years				
Power Consumption	Supply Voltage ⁽⁸⁾				12 V (± 10%) / 5 V (+10/-7%)						12 V (± 10%) / 5 V (+10/-7%)				
	Active idle (Typ.)		6.38 W		4.25 W		4.00 W		6.62 W		4.36 W		4.46 W		
	Random read / write (4KB Q1) (Typ.)		9.10 W		7.83 W		7.63 W		9.87 W		7.80 W		8.12 W		
Temperature	Temperature	Operating			5°C to 60°C (41°F to 140°F)						5°C to 60°C (41°F to 140°F)				
		Non-operating			-40°C to 70°C (-40°F to 158°F)						-40°C to 70°C (-40°F to 158°F)				
	Shock	Operating			686 m/s² (70 G) (2 ms duration)						686 m/s² (70 G) (2 ms duration)				
		Non-operating			2,450 m/s² (250 G) (2 ms duration)						2,450 m/s² (250 G) (2 ms duration)				
	Vibration	Operating			7.35 m/s² {0.75 G} (5 to 300Hz), 2.45 m/s² {0.25 G} (300 to 500 Hz)						7.35 m/s² {0.75 G} (5 to 300Hz), 2.45 m/s² {0.25 G} (300 to 500 Hz)				
		Non-operating			29.4 m/s² (3.0 G) (5 to 500 Hz)						29.4 m/s² (3.0 G) (5 to 500 Hz)				
	Altitude	Operating			-305 m to 3,048 m						-305 m to 3,048 m				
		Non-operating			-305 m to 12,192 m						-305 m to 12,192 m				
	Relative humidity	Operating			5% to 90% R.H. (No condensation)						5% to 90% R.H. (No condensation)				
		Non-operating			5% to 95% R.H. (No condensation)						5% to 95% R.H. (No condensation)				
Others	Size (H x W x D)				26.1 mm x 101.85 mm x 147 mm						26.1 mm x 101.85 mm x 147 mm				
	Weight		770 g		720 g				770 g		720 g				
	Certification				CE, RCM, BSMI, KC, EAC, UKCA, UL, TUV, ICES, RoHS						CE, RCM, BSMI, KC, EAC, UKCA, UL, TUV, ICES, RoHS				

Note: Model specifications are subject to change without advance notice. Please refer to www.synology.com for the latest information.

- (1) Product images are for illustrative purposes only. Actual product may appear with different labeling or housing, which do not affect the performance characteristics of the product.
- (2) Definition of capacity: Hard drives defines a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity will vary based on file size, formatting, settings, software and operating system. Actual formatted capacity may vary.
- (3) "3.5-inch" is the form factor of HDDs. It does not indicate the drive's physical size.
- (4) A mebibyte (MiB) means 2²⁰ bytes, or 1,048,576 bytes. MB/s is 10⁶ bytes.
- (5) Mean Time to Failure (MTTF) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.
- (6) Workload is defined as the amount of data written, read or verified by commands from host system.
- (7) The warranty period starts from the purchase date as stated on your receipt of purchase. Visit www.synology.com/company/legal/warranty for more information.
- (8) Input voltages are specified at the HDD connector side, during HDD ready state. Make sure the value is no less than -0.3 V DC (less than -0.6 V, 0.1 ms) when turning the power on or off.