Models & Specifications

	DS224C	DS2246	DS212C	DS4246[1]	DS4486	DS460C
MAIN SPECIFICATIONS						
Rack units	2U	2U	2U	4U	4U	4U
Drives per enclosure	24	24	12	24	48	60
Drives per rack unit	12	12	6	6	12	15
Drive form factor	2.5" small form factor	2.5" small form factor	3.5" large form factor	3.5" large form factor	3.5" large form factor	3.5" large form factor
Drive carrier	Single drive	Single drive	Single drive	Single drive	Tandem (dual) drives	Single drive
High-capacity disk drives	N/A	N/A	4TB, 8TB, 10TB at 7.2K RPM	2TB, 4TB, 6TB and 8TB at 7.2K RPM	4TB, 6TB and 8TB at 7.2K RPM	4TB, 8TB, 10TB at 7.2K RPM
Performance disk drives	900GB, 1.2TB and 1.8TB at 10K RPM	600GB, 900GB, 1.2TB and 1.8TB at 10K RPM	N/A	N/A	N/A	N/A
Self-encrypting drives[2]	900GB and 1.8TB at 10K RPM, 800GB and 3.8TB SSD, 800GB SSD + 1.8TB at 10K RPM AES-256, FIPS 140-2 compliant	900GB and 1.8TB at 10K RPM, 800GB and 1.6TB SSD, 800GB SSD + 1.8TB at 10K RPM AES-256, FIPS 140-2 compliant	6TB and 10TB at 7.2K RPM AES-256, FIPS 140-2 compliant	4TB and 6TB at 7.2K RPM, 800GB SSD + 6TB at 7.2K RPM AES-256 FIPS 140-2 compliant	N/A	10TB at 7.2K RPM AES-256, FIPS 140-2 compliant
Solid state drives (full and mixed shelf)	960GB, 3.8TB, 15.3TB, 960GB + 1.8TB	400GB, 800GB, 1.6TB, 3.8TB, 400GB + 1.2TB, 800GB +1.8TB	960GB + 4TB, 960GB + 8TB, 960GB + 10TB	400GB + 2TB, 400GB + 4TB, 400GB + 6TB, 800GB + 8TB	N/A	960GB + 4TB, 960GB + 8TB, 960GB + 10TB
Controller Support	AFF700, AFF300, AFF8000 series, FAS9000, FAS8200, FAS2600 series, FAS8000 series, FAS2500 series, FAS/V6200 series, FAS/V3200 series	FAS8000 series, FAS2500 series, FAS2200 series, FAS/V3200 series, FAS/V6200 series	FAS9000, FAS8200, FAS2600 series, FAS8000 series, FAS2500 series, FAS/V6200 series, FAS/V3200 series	FAS8000 series, FAS2500 series, FAS2200 series, FAS/V3200 series, FAS/V6200 series	FAS9000, FAS8200, FAS8000 series, FAS/V6200 series, FAS/V3200 series	FAS9000, FAS8200, FAS2600 series, FAS8000 series, FAS/V3200 series, FAS/V6200 series

Shelf I/O modules	Dual IOM12 modules	Dual IOM6 modules	Dual IOM12 modules	Dual IOM6 modules	Dual IOM6 modules	Dual IOM12 modules
Optical SAS support	✓	✓	✓	✓	✓	✓
Power supply/cooling fans	Dual, hot-pluggable, integrated power supply/fan assemblies	Dual, hot-pluggable, integrated power supply/fan assemblies	Dual, hot-pluggable, integrated power supply/fan assemblies	Redundant, hot-pluggable, integrated power supply/fan assemblies; Dual supplies required for high-capacity disk drives and SSDs.	Redundant, hot-pluggable, integrated power supply/fan assemblies; Quadruple supplies required.	Dual, hot-pluggable power supply; independent fan assemblies
AC input power voltage (autoranging, VRMS)	100–120V or 200–240V					200-240V
AC input power frequency	50–60 Hz					
DC input power	Not available					
Weight—fully loaded	53.8 lbs (24.4 kg)	49 lbs (22.2 kg)	60lbs (27.2 kg)	110 lbs (49.9 kg)	150 lbs (68kg)	246.9 lbs (112 kg)
Dimensions	Height: 3.4 in. (8.5 cm) Width: 19 in. (48.0 cm) Depth: 19.1 in. (48.4 cm)	Height: 3.4 in. (8.5 cm) Width: 19 in. (48.0 cm) Depth: 19.1 in. (48.4 cm)	Height: 3.4 in. (8.5 cm) Width: 19 in. (48.0 cm) Depth: 19.1 in. (48.4 cm)	Height: 7 in. (17.8 cm) Width: 19 in. (48.3 cm) Depth: 24 in. (61 cm)	Height: 7 in. (17.8 cm) Width: 19 in. (48.3 cm) Depth: 28 in. (71 cm)	Height: 7 in. (17.8 cm) Width: 19 in. (48.3 cm) Depth: 36 in. (91.4 cm)
Clearance dimensions	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 12 in. (30.5 cm) Rear—cooling and maintenance: 25 in. (63.5 cm)	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 12 in. (30.5 cm) Rear—cooling and maintenance: 25 in. (63.5 cm)	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 12 in. (30.5 cm) Rear—cooling and maintenance: 24 in. (61 cm)	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 12 in. (30.5 cm) Rear—cooling and maintenance: 25 in. (63.5 cm)	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 12 in. (30.5 cm) Rear—cooling and maintenance: 36 in. (91.4 cm)	Front—cooling: 6 in. (15.3 cm) Front—maintenance: 30 in. (76 cm) Rear—cooling: 6 in. (15.3 cm) Rear—maintenance: 20 in. (50.8 cm)

Operating acoustic noise	6.9 bels LwAd (2 PCMs)	6.2 bels LwAd (2 PCMs)	6.3 bels LwAd (2 PCMs)	7.0 bels LwAd (4 PCMs)	7.2 bels LwAd (2 PCMs)
Temperature	Operating: 50° F to 104° F (10° C to 40° C)				
	Nonoperating: –40° F to 158° F (–40° C to 70° C)				
Relative humidity	Operating: 20% to 80% noncondensing;				
	Nonoperating: 10 to 95% noncondensing				
Altitude	Operating: 0 to 10,000 ft (0 to 3,045 m)				
	Nonoperating: –1,000 to 40,000 ft (–305 to 12,192 m)				

1. The DS4246 disk shelf only supports high-capacity disk configurations and "Mixed Shelf" SSD configurations that combine SSDs with high-capacity disk drives.
2. NSE relies on the drive manufacturer for assurance-level certification. Self-encrypting drives (SEDs) used with NetApp® Storage. Encryption (NSE) cannot be mixed with non-encrypting HDDs in the same storage system. SnapLock and MetroCluster are not supported with NSE.

Data ONTAP® Support
See the Disk Drive & Firmware Matrix on the NetApp Support site for the most up to date information on which ONTAP software version is needed to support each disk type.