



TeraStation™ 5020 Series

TS5420DN, TS5420RN, TS5820DN, TS51220RH

Windows
Server
2022

Certified

vmware®
READY

STORAGE



PERFORMANCE, SECURITY, and SCALABILITY

The TeraStation 5020 is Buffalo's mid-size enterprise network attached storage (NAS) designed as a secure storage solution optimized for high workloads. Available in desktop and rackmount form factors, the TS5020 comes with high capacities in partial- or full populated models with NAS-grade hard drives included, allowing you to fulfill your data needs now while leaving the option to expand later.

The TS5020 is an evolution of Buffalo's acclaimed TeraStation 5010 and 6000 Series devices, offering improved hardware and firmware with advanced productivity and security features to allow you to do more. With updated CPU and RAM, the TS5020 offers smoother operations and reduced backup times, even with high-load environments. Fully compatible with VMware and Hyper-V, the TS5020 can be set as an iSCSI backup target and iSCSI replication capable, allowing you to fully leverage virtualization to enhance your performance and security. As of firmware version 1.68, TS51220RH models also support NVMe caching for additional performance enhancement to take on IOPS-heavy operations.

Unlike many of our competitors, the TS5020 runs on a closed system to mitigate cyberthreats such as ransomware. Other security features also include two-factor authentication (2FA) to protect your login credentials, drive encryption, and a myriad of on- and offline backup features to protect your data. In addition, the TS5020 will include the acclaimed snapshots feature from our TS6000 devices—a true game changer that allows you to back up and recover data near-instantaneously, without having to undergo cumbersome backup recovery processes. Snapshots are highly-scalable, allowing you to recover individual files to entire storage volumes, and can even help mitigate ransomware.

- Premium grade hardware components (hard drives included), with partially-populated options for additional flexibility
- Improved firmware for optimized and stable performance even with high-load operations
- VMware and Hyper-V certified (iSCSI & NFS certifications) for virtualization solutions, including iSCSI backup support
- Cloud integration with Amazon S3, Wasabi, Dropbox, Box, and Microsoft Azure and OneDrive for flexibility and security
- Up to 2TB NVMe caching support for additional performance enhancement (TS51220RH only)
- Enhanced data security with a closed system, 256-bit drive encryption, and 2FA for login credential security
- Advanced snapshot technology provides near-instantaneous data restoration for protection and ransomware mitigation
- Made in Japan/TAA compliant



AT BUFFALO, WE'RE ALWAYS ON

At Buffalo, we work hard to make sure peace of mind is included with our products. This starts with products that are reliable, easy to deploy and supported after the sale. Once your product is deployed, our team is always available to resolve any questions or issues.

Buffalo products are backed by our award-winning, 24/7 technical support based in North America.

This product comes with a 3-year warranty (5-year warranty for registered TS51220RH products) with optional extended warranty selections.



High-Performance, High-Security Storage Solution

MODELS Part Numbers	TS5420DN (4-BAY)	TS5420RN (4-BAY)	TS5820DN (8-BAY)	TS51220RH (12-BAY)
	TS5420DN0802 (4TBx2) TS5420DN1602 (8TBx2) TS5420DN2402 (12TBx2) TS5420DN3202 (16TBx2) TS5420DN4002 (20TBx2) TS5420DN1604 (4TBx4) TS5420DN3204 (8TBx4) TS5420DN4804 (12TBx4) TS5420DN6404 (16TBx4) TS5420DN8004 (20TBx4)	TS5420RN1604 (4TBx4) TS5420RN3204 (8TBx4) TS5420RN4804 (12TBx4) TS5420RN6404 (16TBx4) TS5420RN8004 (20TBx4)	TS5820DN3204 (8TBx4) TS5820DN4804 (12TBx4) TS5820DN6404 (16TBx4) TS5820DN8004 (20TBx4) TS5820DN6408 (8TBx8) TS5820DN9608 (12TBx8) TS5820DN12808 (16TBx8) TS5820DN16008 (20TBx8)	TS51220RH3204 (8TBx4) TS51220RH4804 (12TBx4) TS51220RH6404 (16TBx4) TS51220RH8004 (20TBx4) TS51220RH9612 (8TBx12) TS51220RH14412 (12TBx12) TS51220RH19212 (16TBx12) TS51220RH24012 (20TBx12)
Form Factor	Desktop	Rackmount	Desktop	Rackmount
INTERNAL HARD DRIVES	NAS Grade	NAS Grade	NAS Grade	Enterprise Grade
Number of included Drives	2 or 4	4	4 or 8	4 or 12
Total Capacity	8, 16, 24, 32, 40, 48, 64, 80TB	16, 32, 48, 64, 80TB	32, 48, 64, 80, 96, 128, 160TB	32, 48, 64, 80, 96, 144, 192, 240TB
Drive Interface	SATA III (6 Gbps)	SATA III (6 Gbps)	SATA III (6 Gbps)	SATA III (6 Gbps)
Supported RAID	0/1/5/6/10/ JBOD (Individual Disks)	0/1/5/6/10/ JBOD (Individual Disks)	0/1/5/6/10/ JBOD (Individual Disks)	0/1/5/6/10/ JBOD (Individual Disks)
USB INTERFACE				
Number of Ports	2x USB 3.2, 2x USB 2.0	2x USB 3.2, 2x USB 2.0	2x USB 3.2, 2x USB 2.0	2x USB 3.2, 2x USB 2.0
PERFORMANCE				
CPU	Annapurna Labs® Alpine Processor AL524 (2.04 GHz Quad-Core)	Annapurna Labs® Alpine Processor AL524 (2.04 GHz Quad-Core)	Annapurna Labs® Alpine Processor AL524 (2.04 GHz Quad-Core)	Annapurna Labs® Alpine Processor AL524 (2.04 GHz Quad-Core)
Memory	8 GB DDR4	8 GB DDR4	8 GB DDR4	16 GB DDR4
SSD Caching	No	No	No	Yes
ENVIRONMENTAL & POWER				
Power Consumption	Max 100W Data Transfer 72W Idling 56W	Max 100W Data Transfer 75W Idling 63W	Max 150W Data Transfer 112W Idling 97W	Max 500W Data Transfer 177W Idling 135W
Power Supply	Internal AC 100-240V Universal 50/60Hz	Internal AC 100-240V Universal 50/60Hz	Internal AC 100-240V Universal 50/60Hz	Internal AC 100-240V* Universal 50/60Hz
Operating Temperature	32° - 104°F (0° - 40°C)	32° - 104°F (0° - 40°C)	32° - 104°F (0° - 40°C)	32° - 104°F (0° - 40°C)
Operating Humidity	10 - 85% non-condensing	10 - 85% non-condensing	10 - 85% non-condensing	10 - 85% non-condensing
SHIPPING				
Unit Dimensions (LxWxH)	9.06 x 6.69 x 8.46 in	16.93 x 16.93 x 1.74 in	9.06 x 11.81 x 8.46 in	29.0 x 18.9 x 3.4 in
Unit Weight	12.41 lbs	18.69 lbs	23.72 - 26.91 lbs	41.03 - 55.37 lbs
LAN INTERFACE				
Number of Ports	TS5420DN, TS5420RN, TS5820DN: 1 (10GBASE-T), 2 (1000BASE-T); TS51220RH: 2 (10GBASE-T), 2 (1000BASE-T)			
File Share Protocol	CIFS/SMB, AFP, FTP, SFTP, NFS, SNMP			
Connector Type	RJ-45			
CLIENT OS SUPPORT	Windows® 11, Windows® 10, Windows® 8.1 (32-bit/64-bit), Windows® 7 (32-bit/64-bit), Windows Server® 2022, Windows Server® 2019, Windows Server® 2016, Windows Server® 2012, Windows Server® 2012R2, macOS® 10.9 or later			
COMPATIBLE DRIVES (For TS51220RH SSD Caching)	OP-NVSSD-512G (512 GB) OP-NVSSD-2.0T (2 TB)			
WARRANTY	Comes with standard 3-year warranty. TS51220RH features standard 5-year warranty when registered within 90 days of purchase.			

*Optional dual power supply available (OP-PU-10R2UWR)

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