



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 fully-populated models with NAS-grade hard drives included (enterprise-grade for TS51220RH models), 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, delivering improved hardware and firmware with advanced productivity and security features. Updated CPU and RAM offer smoother operations and reduced backup times, even with high-load environments, and full compatibility with VMware and Hyper-V allows the TS5020 to be set as an iSCSI backup target so you can fully leverage virtualization to enhance your performance and security. TS5020 supports remote configuration through Buffalo's Remote Management Service to enable detailed system changes from anywhere. As of firmware version 1.68, TS51220RH models also support NVMe caching for additional performance enhancement to take on IOPS-heavy operations.

TS5020 runs on a closed system to mitigate cyberthreats such as ransomware. Other security features also include two-factor authentication (2FA), drive encryption, and Buffalo's Abnormal Login and File Activity Detection feature to help you stay one step ahead of ransomware. In addition, the TS5020 includes the acclaimed snapshots feature from our TS6000 devices—a true game changer that backs up and recover data near-instantaneously, without having to undergo cumbersome backup recovery processes.

- Premium grade hardware components (hard drives included), with partiallypopulated 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, 2FA, and Abnormal File
 Activity Detection for proactive malware protection
- Advanced snapshot technology provides nearinstantaneous data restoration for protection and ransomware mitigation
- Remote configuration enables secure system access and management from anywhere
- 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	TS5420DN (4-BAY)	TS5420RN(4-BAY)	TS5820DN(8-BAY)	TS51220RH (12-BAY)
Part Numbers	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)	TS51220RH1604 (4TBx4) TS51220RH3204 (8TBx4) TS51220RH4804 (12TBx4) TS51220RH6404 (16TBx4) TS51220RH8004 (20TBx4) TS51220RH812 (4TBx12) TS51220RH9612 (8TBx12) TS51220RH12012 (10TBx12) TS51220RH14412 (12TBx12) TS51220RH19212 (16TBx12) TS51220RH24012 (20TBx12)
Form Factor	Desktop	Rackmount	Desktop	Rackmount
INTERNAL HARD DRIVES				
Hard Drive Type Number of Included Drives	NAS Grade 2 or 4	NAS Grade 2 or 4	NAS Grade 4 or 8	Enterprise Grade 4 or 12
Capacity Range Supported RAID	8, 16, 24, 32, 40, 48, 64, 80 TB 0/1/5/6/10/JBOD (Individual Disks)	16, 32, 48, 64, 80 TB 0/1/5/6/10/JBOD (Individual Disks)	32, 48, 64, 80, 96, 128, 160 TB 0/1/5/6/10/JBOD (Individual Disks)	16, 32, 48, 64, 80, 96, 120, 144, 192, 240 TB 0/1/5/6/10/JBOD (Individual Disks)
PERFORMANCE	o,oro rorosos (maratara sista)	C. 1.370/ 10/02/02 (Marviada Disko)	o, more revesses (marriada biolo)	o or rooses (marriada siona)
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 2x USB 3.2	8 GB DDR4	8 GB DDR4	16 GB DDR4
USB 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
SSD Caching	No	No	No	Yes
Snapshots	Yes	Yes	Yes	Yes
Abnormal File Activity Detection	Yes	Yes	Yes	Yes
Remote Configuration	Yes	Yes	Yes	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 150W 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				
Product 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
Product Weight	12.41 lbs	18.69 lbs	23.72 - 26.91 lbs	55.37 lbs
Package Dimensions (LxWxH)	14.1 x 12.2 x 14.3 in 16 lbs	23.03 x 21.26 x 7.87 in 27.2 lbs	13.8 x 16.5 x 13.8 in 23.80 - 31.52 lbs	38.5 x 22.9 x 10.2 in 66.5 lbs
Package Weight	10 103	27.2 100	23.00 - 31.32 103	00.0 100
LAN INTERFACE	1x 10 GbE	1x 10 GbE	4.: 40 OhF	2 42 21 5
Number of Ports	2x 1 GbE	2x 1 GbE	1x 10 GbE 2x 1 GbE	2x 10 GbE 2x 1 GbE
Supported Protocols	TCP/IP	TCP/IP	TCP/IP	TCP/IP
Network File Services	CIFS/SMB, AFP, FTP/ FTPS/SFTP, NFS	CIFS/SMB, AFP, FTP/ FTPS/SFTP, NFS	CIFS/SMB, AFP, FTP/ FTPS/SFTP, NFS	CIFS/SMB, AFP, FTP/ FTPS/SFTP, NFS
Connector Type	RJ-45	RJ-45	RJ-45	RJ-45
CLIENT OS SUPPORT	Windows® 11, 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				_
HDD SSD (For TS51220RH NVMe Caching)	OP-HDN Series, OP-HDHU2 Series 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)

TeraStation[™] 5020 Series









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