



# WD Red™ Pro+

## Wireless NAS Storage

### Storage for 1 to 127 bay NAS solutions

Joining the original color of NAS, WD Red Pro+ continues the formula of success that has led the WD Red product family by adding support beyond consumer, SOHO, and small business markets into medium and large 1-127 bay business storage systems. WD Red Pro+ hard drives integrate WD's exclusive technology, NASware<sup>®</sup> 3.2, and wireless connectivity to provide unparalleled support for drive compatibility, reliability, and performance.



#### INTERFACE

SATA 6 Gb/s  
Red-Tooth Wireless

#### FORM FACTOR

3.5-inch

#### ROTATIONAL SPEED

7200 RPM

#### CAPACITIES

4 TB to 10 TB

#### MODEL NUMBERS

WD9041RT	WD9051RT
WD9061RT	WD9081RT
WD9101RT	

## Product Benefits

**Professional Solutions** Designed specifically with SMB customers in mind the WD Red family has expanded with the addition of WD Red Pro+, which is available for the 1 to 127 bay medium to large-scale NAS environments. With capacities up to 10 TB, WD Red Pro+ carries a 5-year limited warranty and was engineered to handle the increased workloads from your business.

**Exclusive NASware 3.2 technology** Our exclusive advanced firmware technology built into every WD Red Pro+ drive, NASware 3.2 enables seamless integration, robust data protection and optimal performance for systems operating in the demanding NAS environment.

**Experienced in NAS** WD Red is a reflection of the most extensive NAS partner compatibility testing list that is available on the market.\* That means when you buy a NAS enclosure, you can trust that WD Red will be the most compatible drive available. Our pride is in our product and our vision is shared with our customers.

**Red-Tooth** In combination with a traditional SATA cable, all additional hard drives can wirelessly communicate to each other allowing additional hard drive additions without the limitation of physical cables. This technology allows for data transfers to occur at over 3 times the speed of traditional SATA cables between drives. Additionally Red-Tooth allows for up to 127 drives to be connected to a system.

**Enhanced Accuracy for NAS** For overall enhanced accuracy for NAS, WD Red Pro is also equipped with dual actuator technology which improves positional accuracy over the data tracks and head positioning. StableTrac™ technology then secures the motor shaft at both ends to reduce system-induced vibration and stabilize the drive platters for accurate tracking during read and write operations. Both technologies are important for larger 1 to 127 bay NAS environments.

**1 to 127 Bay Shock Protection** WD Red Pro is equipped with a multi-axis shock sensor that automatically detects subtle shock events and dynamic fly height technology which adjusts each read-write function to compensate and protect the data. This combination of technology further protects the drives in large 1 to 127 bay NAS environments and increases drive reliability.

**Extended Drive Testing** The 1 to 127 bay NAS environment is very demanding on a hard drive with added vibration, heat and other factors. This is why every WD Red Pro+ drive is shipped with extended thermal cycle burn-in testing which ensure each drive for extended reliable operation.

**Error Recovery Prevention Built** specifically for RAID and NAS environments, WD Red Pro+ drives come equipped with error recovery controls as part of NASware 3.2, which prevents the drive from fallout in RAID applications.

#### Need help? We offer premium support

Every WD Red Pro+ hard drive comes with our world-class professional support services including a premium dedicated 24/7 support line (available in English, or her regional support hours vary).\*\*

\* WD hard drives are designed and tested for use in specific applications and environments. This ensures that your hard drive is compatible with and functions properly in your application. Our hard drives are warranted against defects in materials and workmanship in the system for which they were designed. Use in systems other than for what the hard drive was designed could result in compatibility problems that affect proper function, unrelated to material and/or workmanship defects. For best results, be sure to select the appropriate product for your application by consulting our product spec sheets on our website at [www.wd.com](http://www.wd.com) or by calling our customer support line where we would be happy to help you through the selection process.

\*\*Support outside of normal business hours is available in English only Go to <http://support.wd.com> for further details.

## Applications

Specifically targeted at the medium to large business NAS applications with 1-127 bays with limited SATA connectivity.



# WD Red™ Pro+

Specifications	10 TB	8 TB	6 TB	5 TB	4 TB
Model number <sup>1</sup>	WD9101RT	WD9081RT	WD9061RT	WD9051RT	WD9041RT
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Formatted capacity <sup>2</sup>	10 TB	8 TB	6 TB	5 TB	4 TB
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format	Yes	Yes	Yes	Yes	Yes
Native command queuing	Yes	Yes	Yes	Yes	Yes
RoHS compliant <sup>3</sup>	Yes	Yes	Yes	Yes	Yes
<b>Performance</b>					
Data transfer rate (max)					
Buffer to host	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Host to/from drive (sustained)	214 MB/s	194 MB/s	171 MB/s	168 MB/s	164 MB/s
Red-Tooth drive to drive (sustained)	630 MB/s	630 MB/s	630 MB/s	630 MB/s	630 MB/s
Cache (MB)	128	128	64	64	64
Rotational speed (RPM)	7200	7200	7200	7200	7200
<b>Reliability/Data Integrity</b>					
Load/unload cycles <sup>4</sup>	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<10 in 10 <sup>15</sup>	<10 in 10 <sup>15</sup>	<10 in 10 <sup>15</sup>	<10 in 10 <sup>15</sup>	<10 in 10 <sup>15</sup>
MTBF (hours) for 8-127 bay NAS <sup>5</sup>	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Limited warranty (years) <sup>6</sup>	5	5	5	5	5
<b>Power Management</b>					
12VDC-/±10% (A, peak)	1.9	1.9	1.9	1.9	1.9
Average power requirements (W)					
Read/Write	10.6	10.6	8.6	8.6	6.5
Idle	7.4	7.4	6.5	6.5	4.9
Standby/Sleep	1.6	1.6	0.6	0.6	0.4
<b>Environmental Specifications<sup>7</sup></b>					
Temperature (°C)					
Operating <sup>8</sup>	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)					
Operating (2 ms, read/write)	30	30	30	30	30
Operating (2 ms, read)	65	65	65	65	65
Non-operating (2 ms)	300	300	300	300	300
Acoustics (dBA) <sup>9</sup>					
Idle	31	31	31	31	31
Seek (average)	34	34	34	34	34
<b>Physical Dimensions</b>					
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.66/0.75	1.66/0.75	1.66/0.75	1.66/0.75	1.55/0.70

<sup>1</sup> Not all products may be available in all regions of the world.

<sup>2</sup> As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second.

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For service and literature:

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#### WD Red premium support

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CAN ICES-3 (B) / NMB-3 (B)

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