

# WD Scorpio<sup>®</sup> Blue<sup>®</sup>

**Mobile Hard Drives** 

With available SATA or PATA interfaces, WD Scorpio Blue drives offer high-performance, low power consumption, and cool operation, perfect for notebooks and other portable devices. Pick the drive that suits your needs with the confidence in knowing that all WD Scorpio Blue drives are built to the highest standards of quality and reliability.

#### **INTERFACE**

SATA and PATA

### MODEL NUMBERS

Advanced Format Technology WD10TEVT WD3200BPVT WD7500KPVT WD6400BPVT WD5000BPVT WD2500BPVT

## WIDTH/HEIGHT

2.75 in./0.37 in. to 0.49 in. 69.85 mm/9.5 mm to 12.5 mm

WD6400BEVT WD1600BEVS WD1200BEVT WD5000BEVT WD3200BEVT WD800BEVT WD2500BEVT WD800BEVS WD1600BEVT

PATA WD3200BEVE WD2500BEVE WD1600BEVE WD1200BEVE WD800BEVE

**ROTATIONAL SPEED** 

5200 to 5400 RPM



CAPACITIES 80 GB to 1 TB

Note: Not all products may be available in all regions of the world.

## **Product Features**

#### Massive capacity

Whether they are in an external drive or a notebook computer, WD Scorpio Blue SATA drives continue to offer the highest capacity for space-hungry operating systems with plenty of room left over for photos, music, and video. A slight increase in overall drive height (750 GB and 1 TB only) has driven storage capacity for 2.5-inch form factor drives upwards to a realm once thought to be impossible.

\* 750 GB and 1 TB models are 12.5 mm high and may not be compatible with all notebook systems. Consult system specifications for maximum allowable drive height before attempting to install.

#### Quiet

SATA

WD1600BPVT

In a notebook drive, silence is golden. WD's exclusive WhisperDrive™ combines state-ofthe-art seeking algorithms to yield one of the quietest 2.5-inch hard drives on the market. These algorithms also optimize the way a drive seeks for data, which significantly improves power consumption. So now silence (and longer battery life) is golden.

#### Reliable and rugged

WD's ShockGuard™ technology protects the drive mechanics and platter surfaces from shocks. WD's . SecurePark™ parks the recording heads off the disk surface during spin up, spin down, and when the drive is off. This ensures the recording head never touches the disk surface resulting in improved long term reliability due to less head wear, and improved non-operational shock tolerance.

#### Fast and efficient

Ultra-fast 3 Gb/s SATA interface speed yields performance fit for demanding mobile applications.

#### Tested for compatibility

We perform tests on hundreds of systems and a multitude of platforms in our FIT Lab™ and Mobile Compatibility Lab to give our customers confidence that our drives will work in their systems

#### Advanced Format Technology

Technology being adopted by WD and other drive manufacturers to increase media format efficiencies, thus enabling larger drive capacities. (PVT models only)



# WD Scorpio Blue

Specifications	1 TB	750 GB	640 GB	500 GB	320 GB	320 GB	250 GB	250 GB
Model number	WD10TPVT	WD7500KPVT	WD6400BPVT WD6400BEVT	WD5000BPVT WD5000BEVT	WD3200BPVT WD3200BEVT	WD3200BEVE	WD2500BPVT WD2500BEVT	WD2500BEVE
Interface	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	PATA 100 MB/s	SATA 3 Gb/s	PATA 100 MB/s
Formatted capacity <sup>1</sup>	1,000,204 MB	750,156 MB	640,135 MB	500,107 MB	320,072 MB	320,072 MB	250,059 MB	320,072 MB
User sectors per drive	1,953,525,168	1,465,149,168	1,250,263,728	976,773,168	625,142,448	625,142,448	488,397,168	625,142,448
Master/slave support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch
RoHS compliant <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance								
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	100 MB/s <sup>3</sup> 97 Mbytes/s	3 Gb/s 106 Mbytes/s	100 MB/s <sup>3</sup> 97 Mbytes/s
Cache (MB)	8	8	8	8	8	8	8	8
Average latency (ms)	5.7	5.7	5.5	5.5	5.5	5.5	5.5	5.5
Rotational speed (RPM)	5200	5200	5400	5400	5400	5400	5400	5400
Average drive ready time (sec)	8	8	4	4	4	4	4	4
Reliability/Data Integrity								
Load/unload cycles <sup>4</sup>	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>
Limited warranty (years) <sup>5</sup>	3	3	3	3	3	3	3	3
Power Management								
5VDC ±10% (A, peak)	0.985	0.985	0.950	0.950	0.950	1.00	0.950	1.00
Average power requirements (W) Read/Write Idle Standby/Sleep	1.7 0.75 0.18	1.7 0.75 0.18	1.6 0.65 0.20	1.6 0.65 0.20	1.6 0.85 0.20	2.5 0.85 0.20	1.6 0.85 0.20	2.5 0.85 0.20
Environmental Specifications <sup>6</sup>								
Temperature (°C) Operating Non-operating	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65
Shock (Gs) Operating (2 ms, read) Non-operating	350 1000 (2 ms)	350 1000 (2 ms)	350 1000 (2 ms)	350 1000 (2 ms)	350 1000 (2 ms)	350 900 (1 ms)	350 1000 (2 ms)	350 900 (1 ms)
Average acoustics (dBA) <sup>7</sup> Idle mode Average seek mode	24 25	24 25	23 25	23 25	24 25	24 25	24 25	24 25
Physical Dimensions								
Height (in./mm, max) <sup>8</sup>	0.49/12.50	0.49/12.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50
Length (in./mm, max)	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20
Width (in./mm, ± .01 in.)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Weight (lb./kg, ± 10%)	0.34/0.15	0.34/0.15	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10

<sup>1</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 (MBC/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-10 organization as of the date of this specification sheet. Visit www.sata-io.org for details. <sup>2</sup> WD hard drive products manufactured and sold worldwide after June 1, 2006, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the European Union for electrical and electronic products. The RoHS Directive 2002/95/EC of the European Parliament, which is effective in the EU beginning July 1, 2006, aims to protect human health and the environment by restricting the use of certain hazardous substances in new equipment, and consists of restrictions on lead, mercury, cadmium, and other substances.

<sup>3</sup>Maximum burst rate running the Mode 5 Ultra ATA transfer mode.

<sup>4</sup>Controlled unload at ambient condition.

<sup>5</sup>The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.  $^{6}\mathrm{No}$  non-recoverable errors during operating tests or after non-operating tests.

<sup>7</sup>Sound power level.

8750 GB and 1 TB models are 12.5 mm high and may not be compatible with all notebook systems. Consult system specifications for maximum allowable drive height before attempting to install.



# WD Scorpio Blue

Specifications	160 GB	160 GB	160 GB	120 GB	120 GB	80 GB	80 GB	80 GB
Model number	WD1600BPVT WD1600BEVT	WD1600BEVS	WD1600BEVE	WD1200BEVT	WD1200BEVE	WD800BEVT	WD800BEVS	WD800BEVE
Interface	SATA 3 Gb/s	SATA 1.5 Gb/s	PATA 100 MB/s	SATA 3 Gb/s	PATA 100 MB/s	SATA 3 Gb/s	SATA 1.5 Gb/s	PATA 100 MB/s
Formatted capacity <sup>1</sup>	160,041 MB	160,041 MB	160,041 MB	120,034 MB	120,034 MB	80,026 MB	80,026 MB	80,026 MB
User sectors per drive	312,581,808	312,581,808	312,581,808	234,441,648	234,441,648	156,301,488	156,301,488	156,301,488
Master/slave support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch
RoHS compliant <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance								
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	100 MB/s <sup>3</sup> 97 Mbytes/s	3 Gb/s 106 Mbytes/s	100 MB/s <sup>3</sup> 97 Mbytes/s	3 Gb/s 106 Mbytes/s	3 Gb/s 106 Mbytes/s	100 MB/s³ 97 Mbytes/s
Cache (MB)	8	8	8	8	8	8	8	8
Average latency (ms)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Rotational speed (RPM)	5400	5400	5400	5400	5400	5400	5400	5400
Average drive ready time (sec)	4	4	4	4	4	4	4	4
Reliability/Data Integrity								
Load/unload cycles <sup>4</sup>	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>
Limited warranty (years) <sup>5</sup>	3	3	3	3	3	3	3	3
Power Management								
5VDC ±10% (A, peak)	0.950	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Average power requirements (W) Read/Write Idle Standby/Sleep	1.6 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20	2.5 0.85 0.20
Environmental Specifications <sup>6</sup>								
Temperature (°C) Operating Non-operating	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65
Shock (Gs) Operating (2 ms, read) Non-operating	350 1000 (2 ms)	300 900 (1 ms)	350 900 (1 ms)	300 1000 (2 ms)	350 900 (1 ms)	300 1000 (2 ms)	300 900 (1 ms)	350 900 (1 ms)
Average acoustics (dBA) <sup>7</sup> Idle mode Average seek mode	24 25	24 25	24 25	24 25	24 25	24 25	24 25	24 25
Physical Dimensions								
Height (in./mm, max)	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50
Length (in./mm, max)	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20
Width (in./mm, ± .01 in.)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Weight (lb./kg, ± 10%)	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10

<sup>1</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 billion bytes per second (Gb/s) = one billion bits per second. Effective maximum SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-10 organization as of the date of this specification sheet. Visit www.sata-io.org for details.

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<sup>4</sup>Controlled unload at ambient condition.

<sup>5</sup>The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.

<sup>6</sup>No non-recoverable errors during operating tests or after non-operating tests.

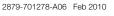
<sup>7</sup>Sound power level.



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COMPLIANT	ı U





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