

WD Scorpio™ Mobile Hard Drives

High Performance
Low Power
Whisper Quiet
Rugged Design



INTERFACE

SATA or EIDE

WIDTH/HEIGHT

69.85 mm/9.5 mm

ROTATIONAL SPEED

5400 RPM

CAPACITIES

40 to 160 GB

MODEL NUMBERS

SATA Drives EIDE Drives

2 MB Buffer 2 MB Buffer

WD400BEAS WD400UE

WD600BEAS WD600UE

WD800BEAS WD800UE

WD1000BEAS WD1000UE

WD1200BEAS WD1200UE

WD1600BEAS

8 MB Buffer

WD400VE

WD400BEVS WD600VE

WD600BEVS WD800VE

WD800BEVS WD1000VE

WD1000BEVS WD1200VE

WD1200BEVS

WD1600BEVS

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

WD Scorpio 2.5-inch drives offer fast performance and low power consumption, making them ideal for notebooks and other portable devices. Now offered in capacities up to 160 GB in SATA or EIDE interface, WD Scorpio can help meet your portable storage needs with increased capacity.

Product Benefits

- **Fast** — spins at 5400 RPM and delivers seek times of 12 ms. It has a standard 2 MB cache with an 8 MB option.
- **Efficient** — spins at 5400 RPM for fast performance but has power consumption specifications similar to slower 4200 RPM drives. Low power consumption yields increased overall reliability.
- **Quiet** — features WD's exclusive WhisperDrive™ technology with SoftSeek™ algorithms to deliver nearly inaudible operation.
- **Reliable** — provides ShockGuard™ to protect the drive mechanics and delicate platter surface from shocks, both when it's in use and when it's not.

WD Scorpio's DuraStep Ramp™ locks the heads off the data disk to provide additional shock protection. Using the most technologically advanced material available on the market, the drive is able to execute a minimum of 600,000 load/unload cycles — up to twice the performance of its competitors.

The WD Promise



WD understands the importance of the information you save to your hard drive and we are committed to protecting that data with exceptionally reliable products, advanced data protection technology, and superior customer support. No one does more to safeguard your data than WD.

WD Scorpio Mobile Hard Drives



Drive Specifications

| | 40 GB | 60 GB | 80 GB | 100 GB | 120 GB | 160 GB |
|---------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| Formatted capacity ¹ | 40,020 MB | 60,022 MB | 80,026 MB | 100,030 MB | 120,034 MB | 160,041 MB |
| User sectors per drive | 78,140,160 | 117,210,240 | 156,301,488 | 195,371,568 | 234,441,648 | 312,581,808 |
| WD model number | | | | | | |
| SATA | | | | | | |
| 2 MB cache buffer | WD400BEAS | WD600BEAS | WD800BEAS | WD1000BEAS | WD1200BEAS | WD1600BEAS |
| 8 MB cache buffer | WD400BEVS | WD600BEVS | WD800BEVS | WD1000BEVS | WD1200BEVS | WD1600BEVS |
| EIDE | | | | | | |
| 2 MB cache buffer | WD400UE | WD600UE | WD800UE | WD1000UE | WD1200UE | |
| 8 MB cache buffer | WD400VE | WD600VE | WD800VE | WD1000VE | WD1200VE | |



SATA Hard Drives

| | |
|-----------------------------|---------------|
| Bytes per sector (STD) | 512 |
| Form factor | 2.5-inch |
| Interface | SATA 150 MB/s |
| RoHS compliant ² | Yes |

EIDE Hard Drives

| | |
|-----------------------------|-------------|
| Bytes per sector (STD) | 512 |
| Form factor | 2.5-inch |
| Interface | 44-pin EIDE |
| RoHS compliant ² | Yes |



Performance Specifications

SATA Hard Drives

| | |
|---------------------------------|------------------------------------|
| Average latency | 4.2 ms |
| Cache | |
| Read | Adaptive |
| Write | Yes |
| Data transfer rate | |
| Buffer to disk | 600 Mbits/s (maximum) ³ |
| Buffer to host | 150 MB/s (maximum) |
| Drive ready time | 4.0 sec (average) |
| Error rate (non-recoverable) | <1 in 10 ¹⁴ bits read |
| Rotational speed | 5400 RPM |
| Seek time | |
| Full stroke read | 21 ms (average) |
| Read | 12.0 ms (average) |
| Track-to-track | 2.0 ms (average) |
| Load/unload cycles ⁵ | 600,000 |

EIDE Hard Drives

| | |
|-------------------------------------|----------------------------------|
| Average latency | 5.5 ms |
| Cache | |
| Read | Adaptive |
| Write | Yes |
| Data transfer rate (buffer to host) | |
| Mode 5 Ultra ATA ⁴ | 100 MB/s |
| Mode 4 Ultra ATA ⁴ | 66.6 MB/s |
| Mode 2 Ultra ATA ⁴ | 33.3 MB/s |
| Mode 2 Ultra DMA ⁴ | 16.6 MB/s |
| Mode 4 Ultra PIO ⁴ | 16.6 MB/s |
| Buffer to disk | 500 Mbits/s (maximum) |
| Drive ready time | 4.0 sec (average) |
| Error rate (non-recoverable) | <1 in 10 ¹⁴ bits read |
| Rotational speed | 5400 RPM |
| Seek time | |
| Full stroke read | 21 ms (average) |
| Read | 12.0 ms (average) |
| Track-to-track | 2.0 ms (average) |
| Load/unload cycles ⁵ | 600,000 |



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¹One gigabyte (GB) = 1,000,000,000 bytes. Total accessible capacity varies depending on operating environment.

²WD complies with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC of the European Parliament, which is effective in the EU beginning July 1, 2006. RoHS 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.

³Buffer to disk transfer rate for WDxxxxBEAS/BEVS ML80 drives. ML60 WDxxxxBEAS/BEVS and WDxxxxUE/VE drives have a buffer to disk transfer rate of 500 MB/s max. ML40 WDxxxxUE/VE drives have a buffer to disk transfer rate of 421 MB/s max.

⁴Maximum burst rate running the specified PIO, DMA, or Ultra ATA transfer mode.

⁵Controlled unload at ambient condition.