



feature	unit	Western Digital RED WD40EFRX	Seagate Savvio 15K.3	Seagate Enterprise Performance 15K V4
device type		HDD	HDD	HDD
BUS type		SATA 600	SAS 6GB/sec	SAS 6GB/sec
size	GB	4000	300	600
price	Euro/GB	0.04	0.89	?
seq read	MB/sec	112.81	174.43	223.46
seq write	MB/sec	112.78	173.8	222.36
random read	ms	16.52	5	5.2
random write	ms	18.58	2.36	2.41
power idle	W	3.3(toms)	4.23(official)/6.8(toms)	5.9(official)
power average	W	5.8(toms)	7.92(official)/7.9(toms)	8.5(official)
notes		biggest for SATA end-users 5400 rpm, cheap but slow	very fast, small, professional use 15,000 rpm, loud, server	even faster, small, 15,000 rpm, load, server
usage		normal users	heavy write I/O	heavy write I/O

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feature	unit	Fusion-io ioDrive Octal	OCZ R-Drive R4 RM88	Samsung 840 Pro	Toshiba PX02SSx
device type		Flash Drive	PCIe Flash Drive	<u>SSD</u>	<u>SSD</u>
BUS type		<u>PCI-Express</u> x16 Gen2.0	<u>PCI Express</u> x8 Gen2.0	<u>SATA III</u>	<u>SAS 3.0</u>
size	GB	up to 10240	800	up to 512	up to 800
price	Euro/GB	> 9	15.3	0.79	?
seq read	MB/sec	6700	up to 2800	530	1100
seq write	MB/sec	3900	up to 2800	390	410
random access time	ms	<u>0.045</u>	?	0.09	?
IOPS	1/s	1.3 Million	?	90,000	130,000
power idle	W	?	23	54	?
power average	W	?	26	0.3	2.7-3.6
notes		fastest Flash Drive, very expensive	high-end sequential and random write	among the fastest general purpose customer drives	very fast enterprise class SSD
usage		High End	High End	Customer	Enterprise

# Sources [retrieved November 2013]

western digital:

price: [http://www.alternate.de/Western\\_Digital/Western\\_Digital+WD40EFRX\\_4\\_TB,\\_Festplatte/html/product/1098412/](http://www.alternate.de/Western_Digital/Western_Digital+WD40EFRX_4_TB,_Festplatte/html/product/1098412/)?

speed, power: <http://www.tomshardware.com/charts/hdd-charts-2013/benchmarks,134.html>

seagate savvio:

price: 266,98€ [idealo.de, 25.11.13]

speed: <http://www.tomshardware.com/charts/enterprise-hdd-charts/benchmarks,156.html>

official data sheet: <http://www.seagate.com/files/www-content/product-content/savvio-fam/enterprise-performance-15k-hdd/savvio-15k-3/en-us/docs/savvio-15k-3-data-sheet-ds1732-5-1201us.pdf>

seagate enterprise performance:

speed: <http://www.tomshardware.com/charts/enterprise-hdd-charts/benchmarks,156.html>

official data sheet: <http://www.seagate.com/files/www-content/product-content/savvio-fam/enterprise-performance-15k-hdd/savvio-15k-4/en-us/enterprise-performance-15k-hdd-ds1797-1-1307us.pdf>

# Sources

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<http://www.fusionio.com/products/iodrive-octal/>

price: <http://www.solidstateworks.com/ioDrive-Octal.asp>

ocz z-drive:

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<http://ocz.com/enterprise/z-drive-r4-pcie-ssd/rs-specifications>

Toshiba PX02SSx:

<http://www.zdnet.de/88174368/toshiba-bringt-enterprise-ssd-fuer-server-und-storage-systeme/>

Samsung 840 Pro:

<http://www.heise.de/preisvergleich/samsung-ssd-840-pro-series-128gb-mz-7pd128bw-a841473.html>

price: <https://www.amazon.de/Samsung-Series-interne-SSD-Festplatte-anthrazit/dp/B009LI7CTY>