

## Brief Specification Mobile HDD (1.8-type)

MK1617GSG / MK8017GSG

ITEM	MK1617GSG	MK8017GSG
<b>Basic specification</b>		
Interface	Serial ATA 2.6 / ATA8	Serial ATA 2.6 / ATA8
Interface speed	1.5Gb/s	1.5Gb/s
Formatted Capacity	160GB	80GB
Number of data heads	4	2
Number of disks	2	1
Number of User data cylinders	91,008	91,008
Bytes per sector (HOST)	512	512
Bytes per sector (DISK)	512	1024
Logical Blocks (LBA)	312,581,808	156,301,488
Maximum areal density	382.5Mbit/mm <sup>2</sup> (246.8Gbit/in <sup>2</sup> )	382.5Mbit/mm <sup>2</sup> (246.8Gbit/in <sup>2</sup> )
Environmental compliance	RoHS compliant	RoHS compliant
<b>Performance</b>		
Buffer size	8MB	8MB
Rotation speed	5,400rpm	5,400rpm
Average Latency time	5.55 ms	5.55 ms
Internal transfer rate	227 to 489 Mb/s (typ.)	227 to 489 Mb/s (typ.)
Average seek time	15ms	15ms
Track to track seek time	3ms	3ms
Max. seek time	26ms	26ms
<b>Reliability</b>		
Load/Unload	600,000 times	600,000 times
Error rate non-recoverable	1/10 <sup>14</sup> bit read	1/10 <sup>14</sup> bit read
<b>Supply Voltage</b>		
Allowable Voltage	3.3 V ±5%	3.3 V ±5%
<b>Power consumption</b>		
Start	2.5W (max.)	2.5W (max.)
Seek	1.4W (typ.)	1.4W (typ.)
Read/Write	1.4W (typ.)	1.4W (typ.)
Low power Idle	0.45W (typ.)	0.45W (typ.)
Stand-by	0.15W (typ.)	0.15W (typ.)
Sleep	0.10W (typ.)	0.10W (typ.)
Energy Consumption Efficiency	0.0029	0.0057
/Category name	L	K
<b>Dimension</b>		
Height	8.0mm	8.0mm
Width	54.0mm	54.0mm
Depth	78.5mm	78.5mm
Weight	62g (max.)	60g (max.)
<b>Temperature</b>		
Operating	5 to 55°C	5 to 55°C
Non-Operating	-20 to 65°C	-20 to 65°C
Shipping	-40 to 70°C	-40 to 70°C
<b>Vibration/Shock</b>		
Vibration (op)	19.6m/s <sup>2</sup> (2.0G)	19.6m/s <sup>2</sup> (2.0G)
Vibration (non-op)	49m/s <sup>2</sup> (5.0G)	49m/s <sup>2</sup> (5.0G)
Shock (op)	4,900m/s <sup>2</sup> (500G) (2ms half sine)	4,900m/s <sup>2</sup> (500G) (2ms half sine)
Shock (non-op)	14,700m/s <sup>2</sup> (1500G) (1ms half sine)	14,700m/s <sup>2</sup> (1500G) (1ms half sine)
<b>Acoustics</b>		
Idle (ave.)	18dB	16dB
Seek (ave.)	23dB	22dB

\*Energy Consumption Efficiency: Energy consumption efficiency is calculated based on power consumption divided by formatted capacity, as defined by Japanese law.

\*Definition of Capacity: TOSHIBA defines a megabyte (MB) as 1,000,000bytes, and a gigabyte (GB) as 1,000,000,000 bytes.