

Enterprise HDD

MK3001GRRB / MK1401GRRB / MK3001GRRR / MK1401GRRR

	MK3001GRRB MK3001GRRR	MK1401GRRB MK1401GRRR
Basic Specifications		
Interface	SAS-2.0	
Interface Speed	6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s	
Formatted Capacity	300 GB	147 GB
Logical Data Block Length (HOST)	512 to 528 B (fixed length)	
Logical Data Block Length (DISK)	512 to 528 B (fixed length)	
Environmental Compliance	RoHS Compatible	
Performances		
Buffer Size	32 MiB FIFO ring buffer	
Rotation Speed	15,000 rpm	
Average Latency Time	2.0 ms	
Reliability		
Unrecoverable Error Rate	10 per 10 ¹⁷ bits read	
Power Requirements		
Supply Voltage	5 V ±5 % , 12 V ±5 %	
Power Consumption (Idle-B)	4.0 W Typ.	3.8 W Typ.
Dimensions		
Height	15.0 mm +0 , -0.5 mm	
Width	69.85 mm ±0.25 mm	
Length	100.45 mm Max.	
Weight	225 g Max.	
Environmental Requirements		
Temperature (Operating)	5 to 55 °C	
Temperature (Non-operating)	-40 to 70 °C	
Humidity (Operating)	5 to 95 % R.H.	
Humidity (Non-operating)	5 to 95 % R.H.	
Altitude (Operating)	-305 to +3,048 m { -1,000 to +10,000 feet }	
Altitude (Non-operating)	-305 to +12,192 m { -1,000 to + 40,000 feet }	
Vibration (Operating)	9.8 m/s ² { 1.0 G } (20 to 300 Hz)	
Vibration (Non-operating)	49 m/s ² { 5.0 G } (20 to 300 Hz)	
Shock (Operating)	980 m/s ² { 100 G } (1 ms duration)	
Shock (Non-operating)	3,920 m/s ² { 400 G } (1 ms duration)	

- ▶ Product image may represent a design model.
- ▶ Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.
- ▶ A kibibyte (KiB) means 2¹⁰, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, or 1,073,471,824 bytes.
- ▶ Toshiba Storage & Electronic Devices Solutions Company defines "RoHS-Compatible" products as products that either (i) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) and of 0.01% by weight in Homogeneous Materials for cadmium; or (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive (Directive 2011/65/EC of the European Parliament and of the Council of 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment). "Homogeneous Material" means a material of uniform composition that cannot be mechanically disjointed (meaning separated, in principle, by mechanical actions such as unscrewing, cutting, crushing, grinding and/or abrasive processes) into different materials. Examples of "Homogeneous Materials" would be individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.
- ▶ Toshiba Storage & Electronic Devices Solutions Company defines halogen-free and antimony-free SSD and HDD products as those meeting all of the following requirements: (a) containing bromine (Br) and chlorine (Cl) at no more than 900 parts per million (ppm) by weight for each element, and containing bromine and chlorine in an aggregate amount not exceeding 1500 ppm by weight; and (b) containing no more than 1000 ppm antimony (Sb) by weight. For the avoidance of doubt, Halogen-Free/Antimony-Free SSD or HDD products may not be entirely free of bromine, chlorine, or antimony, and may contain other element of the halogen family.
- ▶ Read and write speed may vary depending on the host device, read and write conditions, and file size.
- ▶ "2.5-inch" and "3.5-inch" mean the form factor of HDDs or SSDs. They do not indicate drive's physical size.