

Pioneer™ SG

Specifications

Pioneer SG	1.0	2.1
Form Factor	3.5 inch (low profile)	
Interface	Fast ATA-2	
Formatted Capacity (MB ¹)	1,082	2,111
Disk Drive Configuration		
Recording Surfaces	2	4
AT Logical		
Cylinders	2,097	4,092
Heads	16	16
Sectors	63	63
Performance Specifications		
Typical Seek Times ² (ms)		
Average	12	
Track-to-Track	4	
Full Stroke	26	
Average Rotational Latency (ms)	6.7	
Rotational Speed (RPM)	4,500	
Internal Data Rate (Mb/sec)	Up to 101	
Data Transfer Rates (Buffer-to-Host)		
Fast ATA-2 (MB/sec)		
PIO Mode 4	16.6	
DMA Mode 2	16.6	
Buffer Size (KB)	64	
Typical Power On to Drive Ready (sec)	10.5	
Reliability Specifications		
Start/Stop Cycles (ambient)	40,000	
Non-recoverable Data Errors	<10 per 10 ¹⁵ (per bits read)	
Warranty ³ (years)	3	
Physical Specifications		
Dimensions - inches (mm)		
Width	4.00 (101.6)	

Length	5.75 (146.1)
Height	1.00 (25.4)
Weight - pounds (kg)	0.90 (0.41)

Environmental Limits

Operating

Temperature (oC)	5 to 55
Non-Condensing Humidity (%)	5 to 85
Shock (G, 11 ms)	10
Vibration (G)	1 (5 to 300 Hz, peak-to-peak)
Altitude (ft.)	-650 to 8,000

Non-Operating

Temperature (oC)	-40 to 65
Non-Condensing Humidity (%)	5 to 95
Shock (G, 11 ms)	70
Vibration (G)	2 (5 to 300 Hz, peak-to-peak)
Altitude (ft.)	-650 to 40,000

Idle Sound (typ) (Quantum Pioneer SG 2.1)

Pressure (dBA)	30
Power (bels)	3.5

Power Specifications

Nominal Voltage (V)	+ 5 / + 12
Voltage Margin (%)	± 5 / ± 10
Typical Power Draw (W) (Quantum Pioneer SG 2.1)	
Standby	0.8
Idle	3.7
Operating ⁴	5.2
Peak Current (mA on +5/+12V)	480 / 1,000

1. Quantum defines a megabyte (MB) as 10^6 or 1,000,000 bytes.
2. Seek times are at nominal conditions and include settling for read.
3. This warranty is standard when products are purchased directly through authorized Quantum distributors/dealers. Unless otherwise agreed, a one-year warranty is provided to all OEMs purchasing directly from Quantum. End-user warranties provided by computer manufacturers may vary.
4. Operating is defined as 40% seeking, 30% reading, 10% writing, and 20% idle.