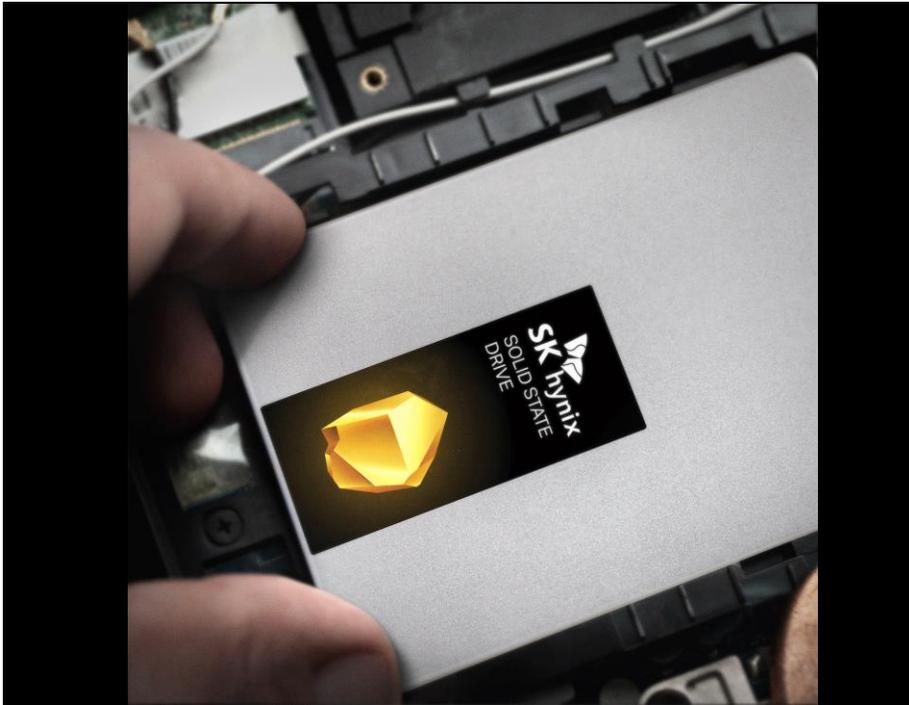


# SK hynix Gold S31 SSD

## PRODUCT BRIEF



### Product Highlight

#### Striking Performance

- Top tier speed, best-in-class sequential read speeds.
- Sequential read speeds up to 560MB/s and sequential write speeds up to 525MB/s.

#### Ultimate Support & 5-year Warranty

- SK hynix 5-year warranty
- 1,000 hours of high-temperature operating life test (HTOL) with Mean Time between Failures (MTBF) reaching 1.5 million hours

#### In-house Technology

- All components produced in-house ensuring high quality and reliability

**Gold P31 Series Product Specification**

Capacity		1TB	500GB	250GB
Form Factor		STD 2.5"		
NAND Technology		3D NAND		
Interface		SATA Gen3 6.0Gb/s		
Sequential Performance <sup>1)</sup>	Read (up to) <sup>4)</sup>	560 MB/s	560 MB/s	560 MB/s
	Write (up to)	525 MB/s	525 MB/s	500 MB/s
Random Performance <sup>2)</sup>	Read (up to) <sup>5)</sup>	95K IOPS	90K IOPS	54K IOPS
	Write (up to)	87K IOPS	87K IOPS	87K IOPS
Latency	Read (Typical)	107us	123us	123us
	Write (Typical)	33us		
Power Consumption		Active Read <sup>6)</sup>	Active Write <sup>6)</sup>	Idle(Typical) <sup>7)</sup>
		<2.0W	<2.4W	100mW
Temperature Range Operation <sup>3)</sup>		- 0°C to 70°C - Temperature Sensor (SMART Attributes Bytes ID 194)		
Reliability <sup>8)</sup>		MTBF	1.5M hours	
		BER	1 error in 10 <sup>15</sup> bits transferred	
Dimension		(7+0.2/-0.5) x (69.85±0.15) x (100±0.15) mm		
Weight		52.4g±5%		

- 1) Measured using IOMeter2006 with queue depth 32. Set to 128KB alignment. System variations may affect measured results.
- 2) Measured using IOMeter2006 with queue depth 32. Set to 4KB alignment. System variations may affect measured results.
- 3) Tc is measured at the surface of Module center through Temp sensor. Active airflow is recommended within the system for maintaining the device operating temperature.
- 4) Set to 128KB alignment
- 5) Set to 4KB alignment
- 6) Active power is measured during execution of sequential read/write 128KB with queue depth 32.
- 7) DIPM enable (Device Initiated Power Management)
- 8) The SSD incorporate advanced technology for defect and error management, they use various combinations of hardware-based error correction algorithms and firmware based static and dynamic wear-leveling algorithms.