BIWIN
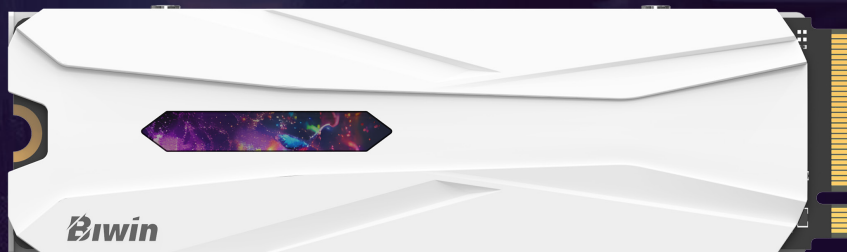
Black Opal X570H PRO SSD

PCIe Gen5×4, NVMe 2.0	Read Speeds Up to 14000 MB/s	Large Capacity Up to 4 TB	Premium TLC NAND

Biwin Black Opal X570H PRO SSD with PCIe Gen5×4 and NVMe 2.0 achieves read speeds up to 14000 MB/s—twice the speed of PCIe 4.0 and four times the speed of PCIe 3.0. This breakthrough speed allows for faster data transfers, reducing load times significantly and improving overall system responsiveness. Experience improved productivity and improved efficiency with storage designed to keep up with even your most demanding workflow.

▸ Product Features

Elevate Your Performance with 4 GB Cache

Equipped with 4 GB of dedicated cache, the Biwin Black Opal X570H PRO delivers a powerful performance boost, accelerating data access while also extending the drive's longevity by minimizing direct write operations on the NAND flash. With up to 2000K IOPS for random reads and 1600K IOPS for random writes, this SSD reduces latency and improves data access for faster performance even during intensive gaming and demanding workloads.

6 nm Controller, Precision for Powerful Performance

The X570H PRO uses an advanced 6 nm controller, supporting up to 8 flash memory channels to deliver exceptional data throughput. The efficient 6 nm process optimizes efficiency, ensuring high performance while maintaining lower energy usage. By optimizing the data management process, the controller reduces latency, enhances responsiveness, and provides stable performance even under heavy workloads, such as gaming, content creation, and other data-intensive applications.

Spacious Storage for High-Performance

The Black Opal X570H PRO offers a maximum storage capacity of 4 TB, ensuring ample space for all your important files, high-resolution games, and resource-intensive applications. With the X570H PRO, you'll enjoy the benefits of expansive storage and reliable performance, all without worrying about your next storage upgrade.

Advanced Heat Dissipation for Long-Term Efficiency

Biwin X570H PRO integrates an advanced thermal control algorithm with a premium, stylish heatsink that ensures optimal heat dissipation. This intelligent cooling solution actively manages the drive's temperature, preventing thermal throttling and maintaining optimal performance even under demanding conditions. With Biwin X570H PRO, stay cool, and perform at your best.

▸ Biwin Storage Black Opal Series

For decades, Biwin has made the critical storage and memory you'll find in many of the leading digital devices that have defined our digital world. The Biwin consumer brand offers the best of Biwin's experience, a range of SSDs, DRAM, memory cards, USBs, and related accessories that will help you get the most out of your devices.

Biwin Black Opal is especially designed for gamers, enthusiasts, modders, and overclockers seeking top-tier performance. It is the result of years of experience in SSDs and DRAM manufacturing. The durability matches the more strenuous needs of gamers, content providers and professional users.

▸ Specifications

Model Name	Biwin Black Opal X570H PRO		
Form Factor	M.2 2280		
Interface	PCIe Gen5×4, NVMe 2.0		
DRAM Cache	1 GB	2 GB	4 GB
Capacity	1 TB	2 TB	4 TB
Sequential Read (Up to)	14000 MB/s	14000 MB/s	14000 MB/s
Sequential Write (Up to)	10500 MB/s	13000 MB/s	13000 MB/s
Random Read 4K (Up to)	1600K IOPS	2000K IOPS	2000K IOPS
Random Write 4K (Up to)	1600K IOPS	1600K IOPS	1600K IOPS
Dimensions	80.50 × 23.20 × 9.50 mm (single-sided)		
Weight	＜50 g		
Operating Temperature	0°C to +70°C		
Storage Temperature	-40°C to +85°C		
MTBF	1,500,000 hours		
Certifications	RoHS, FCC, CE, CB, KCC, BSMI, VCCI, RCM, UKCA		
Warranty	5-Year / 750 TBW	5-Year / 1500 TBW	5-Year / 3000 TBW

1. Tested by BIWIN labs. Actual performance may vary due to systems, devices, or environment.

2. Maintenance and future updates are required throughout the product life cycle. Specifications are subject to change without notice.

3. The pictures are for illustration only. Actual products may vary due to product enhancements or changes.

4. Not all products are sold in all regions of the world.

5. As used for storage capacity, one megabyte (MB)= one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on the operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabyte per second (GB/s) = one billion bytes per second.

6. MTBF = Mean Time Between Failures based on internal testing using Telcordia stress testing standard.

For more details, please visit www.biwintech.com.

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