Samsung Portable SSD X5

2018 Data Sheet

Revision 10



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INTRODUCTION

Samsung Portable SSD X5 is a revolutionary external storage with integrated cutting-edge NVMe[™] and Thunderbolt[™] 3 technologies. The X5 is designed for content creators and high-tech professionals who need fast and secure access to data in a lightweight and compact storage solution. The X5 also leads the industry with a 2TB capacity option.

Its lightning-fast speed, high capacity and data protection allows content leaders to handle high-resolution contents faster and more securely on-the-go workplace

Unrivaled Speed

Samsung Portable SSD X5 leverages technological synergies between NVMe™ and Thunderbolt™ 3 technologies, offering a remarkably fast interface of up to 40Gbps bandwidth.

X5 delivers read/write speeds of up to 2,800/2,300MB/s respectively, which are more than five times faster than current USB 3.1 PSSD (SATA-based) and more than twenty-five times faster than an external HDD¹⁾.

Revolutionary Design and Well-Engineered Reliability

Inspired by a supercar, the X5's dynamic design is optimized for performance and reliability. Using a durable yet light magnesium full metal body and internal structure, the X5 withstands drops of up to two meters (6.6 feet)²⁾.

The X5 integrates the latest thermal management technologies. The Dynamic Thermal Guard technology safeguards against overheating by automatically maintaining optimal operating temperatures, while a heat sink - a mechanical solution - minimizes the overall heat generation internally.

Strong Data Protection

The X5 offers powerful data protection through Samsung Portable SSD software. You can conveniently manage access to your X5 using password protection based on AES 256-bit hardware encryption.

^{*} Thunderbolt and the Thunderbolt logo are trademark of Intel Corporation in the U.S. and/or other countries.



¹⁾ Based on internal test results (Read performance)

²⁾ The internal free fall shock test was conducted under controlled conditions.

^{*} The NVM Express® design mark is a registered trademark of NVM Express, Inc.

TECHNICAL SPECIFICATIONS

Samsung Portable SSD X5					
Interface	Thunderbolt™ 3 (40Gbps)				
Compatibility	H/W) Macs and Windows PCs with Thunderbolt 3 ports OS) macOS X Sierra (10.12) or higher Windows 10 RS 2 or higher				
Hardware Information	Capacities		500GB/1TB/2TB		
	Dimensions		119 x 62 x 19.7 mm (4.7 x 2.4 x 0.8 in)		
	Weight		150 grams (5.3 oz) ³⁾		
Performance	Sequential Read		Up to 2,800 MB/sec 4)		
	Sequential Write		Up to 2,300 MB/sec ⁵⁾ (500GB : Up to 2,100 MB/s)		
Security	Encryption		AES 256-bit hardware encryption		
	Security		Password protection (Optional)		
	Temperature	Operating	0°C to 60°C		
		Non-Operating	-40°C to 85°C		
Reliability	Humidity	Non-Operating	65°C, 95%		
	Shock	Non-Operating	1,500G, duration: 0.5ms, 3 axis		
	Vibration	Non-Operating	10~2,000Hz, 20G		
Certifications			CE, BSMI, KC, VCCI, C-tick, FCC, IC, UL, TUV, CB		
RoHS Compliance			RoHS 2		
Warranty			Three (3) Year Limited Warranty		

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⁷⁾ 1 GB=1,000,000,000 bytes, 1 TB=1,000,000,000,000 bytes. Lower capacity may be demonstrated by your computer due to use of a different measurement standard.

 $^{^{8)}}$ Exact weight of product may vary by capacity.

⁹⁾ Max data transfer speed is measured based on Samsung's internal testing standards with the enclosed Thunderbolt™ 3 cable. Performance may vary depending on host configuration, cable and user system environment.

PRODUCT LINEUP

Density	Model Name	Model Code	Box Contents
2TB	MU-PB2T0B	MU-PB2T0B/WW MU-PB2T0B/AM MU-PB2T0B/EU	Samsung Portable SSD X5 Thunderbolt™ 3 (40Gbps) USB-C Cable Quick Start Guide & Warranty Statement
1TB	MU-PB1T0B	MU-PB1T0B/WW MU-PB1T0B/AM MU-PB1T0B/EU	
500GB	MU-PB500B	MU-PB500B/WW MU-PB500B/AM MU-PB500B/EU	

