

USB-C 10Gbps to M.2 NVMe or M.2 SATA SSD Enclosure - Portable External M.2 PCIe/SATA NGFF SSD Aluminum Case - USB Type-C & USB-A Host Cables - Supports 2230/2242/2260/2280

Product ID: SM2E1BMU31C



Turn your PCIe M.2 NVMe or SATA AHCI M.2 SSD into a highly portable, USB-based external storage solution. This enclosure features USB 3.2 Gen 2x1 (10Gbps) with UASP support & PCIe 3.0 delivering real read/write data transfer speeds up to 1GB per second. Working with both PCIe and SATA based drives, this enclosure ensures compatibility with virtually any M.2 drive, supporting both M-Key (PCIe) and B+M-Key (SATA) drives sized 2230/2242/2260/2280.

USB 3.2 Gen 2x1 10Gbps (also known as USB 3.1 Gen 2) is backward compatible with USB 3.1 Gen 1 5Gbps (also known as USB 3.0), USB 2.0, and USB 1.1.

With compatibility for both PCIe NVMe and SATA based M.2 drives, this enclosure solves the common challenge of identifying which enclosure is compatible with your M.2 drive. Regardless of whether your M.2 drive is SATA or PCIe NVMe based, you can rest assured that this enclosure will provide a high-performance solution for turning your M.2 drive into a portable external enclosure. For further compatibility the enclosure works with multiple drive heights supporting 2230, 2242, 2260 and 2280mm drives including Samsung (850, 860, 870, 950, 960, 970) Kingston, Seagate, Western Digital (WD), HP, and Intel SSD drives.

For multiplatform support this enclosure, that features a USB-C host connection, includes two different host cables, a USB-C to USB-C cable (20 in. / 50 cm) and a USB-C to USB-A cable (10" / 25 cm). This combined with the backward compatibility of the USB protocol, ensures that this M.2 enclosure will work with virtually any computer, whether it's USB-A, USB-C or Thunderbolt 3.

Leverage the high speeds of your M.2 NVMe or SATA drive, with this external SSD enclosure. It delivers USB 3.2 Gen 2x1 maximum theoretical throughput of 10Gbps, which is twice the throughput of USB 3.2 Gen 1x1 at 5Gbps. The enclosure also supports PCIe 3.0 which when combined with an M.2 NVMe drive takes full advantage of the throughput available to USB 3.2 Gen 2x1.

This fan-less aluminum enclosure features ventilation holes for maximum heat dissipation, ensuring your drive operates noiselessly at an optimal temperature to preserve performance and protect your drive from overheating damage.

This slim, pocket-sized enclosure for PCIe NVMe or SATA based M.2 drives is specially designed for mobility, with a



small form-factor design that fits easily into your laptop bag. Its lightweight, yet durable aluminum housing helps to ensure your drive won't be damaged while you're on the move.

The external M2 SATA or M.2 NVMe SSD enclosure case supports driverless plug-and-play installation and hassle free drive installation. A screwdriver is included ensuring no additional tools are required.

SM2E1BMU31C is backed by a StarTech.com 2-year warranty and free lifetime technical support.

Certifications, Reports and Compatibility















Applications

- Create a portable, high-performance storage solution
- · Access your NVMe or SATA drive externally with ultra-fast transfer speeds
- · Superior speeds are ideal for data-migration related tasks

Features

- HIGH PERFORMANCE: External USB-C or USB-A storage solution for your PCIe M.2 NVMe or SATA M.2 AHCI SSD; This enclosure features USB 3.2 Gen 2 (10Gbps) with UASP support & PCI Express 3.0; Backward compatible with USB 3.0/2.0
- M.2 COMPATIBILITY: Works with M.2 PCIe NVMe (M-Key) & M.2 SATA (B+M-Key) based drives; Works with 2230/2242/2260/2280 SSDs including Samsung 850/860/870/950/960/970, Kingston, Seagate, Western Digital, HP, and Intel SSD drives; NOT COMPATIBLE W/22110mm
- HOST COMPATIBILITY: M.2 SATA or M.2 NVMe SSD enclosure comes with two separate USB host cables to provide support for both USB Type-A and USB Type-C/Thunderbolt 3/4 host devices such as iPhone 15 (Plus/Pro/Max) and up/MacBook/MacBook Pro/Chromebook Pixel
- DURABILITY & RELIABLITY: Enclosure with aluminum housing protects the SSD; The NGFF case features ventilation holes & thermal pads for heat dissipation, ensuring consistency at peak performance levels; Ideal solution for high-speed data backup & recovery
- EASY INSTALLATION: The M2 SATA or M.2 NVMe SSD (solid state drive) adapter enclosure supports driverless plug-and-play installation & hassle free drive installation (screwdriver incl.); 20in (50cm) USB-C cable and 10in (25cm) USB-A cable incl.



Hardware

Warranty 2 Years

Interface USB 3.2 Gen 2

Bus Type USB 3.2 Gen 2 10Gbps

Number of Drives 1

Drive Size 22 mm - M.2 NVMe

Compatible Drive Types M.2 (PCIe, NVMe, M-Key, NGFF)

M.2 (SATA, B+M-Key, NGFF)

Drive Installation Fixed

Supported Drive Height(s) 2230

2242

2260

2280

Chipset ID Realtek - RTL9210B

Performance

Maximum Data Transfer

Rate

10 Gbps

Type and Rate USB 3.2 Gen 2 - 10 Gbit/s

UASP Support Yes

TRIM Support Yes

4Kn Support Yes

Type and Rate NVMe (PCIe Gen 3)

Insertion Rating USB-C: 10,000 cycles

M.2: 60 Cycles

General Specifications Fully compatible with M.2 SATA, AHCI and PCIe NVMe based

drives

MTBF 112,000 Hours



Connector(s)

Drive Connectors 1 - M.2 (PCIe, SATA, M-Key, NGFF)

Host Connectors 1 - USB 3.2 USB Type C (10 pin, Gen 2, 10 Gbps)

Software

OS Compatibility OS independent; No software or drivers required

Special Notes / Requirements

Note Windows 7 and earlier Windows versions do not support TRIM

with USB storage devices.

Indicators

LED Indicators 1 - Power & Activity

Power

Power Source USB-Powered

Input Voltage 5V DC

Output Voltage 5 DC

Environmental

Operating Temperature 0C to 40C (32F to 104F)

Storage Temperature -10C to 65C (14F to 149F)

Humidity Operation Humidity: 10% ~ 90% RH

Storage Humidity: 5% ~ 95% RH

Physical Characteristics

Color Black

Material Aluminum and Plastic

Product Length 1.6 in [4.0 cm]

Product Width 5.1 in [13.0 cm]

Product Height 0.6 in [1.4 cm]

Weight of Product 2.6 oz [74.0 g]

Packaging Information



	Package Quantity	1
	Package Length	4.2 in [10.6 cm]
	Package Width	6.1 in [15.4 cm]
	Package Height	1.4 in [3.5 cm]
	Shipping (Package) Weight	6.5 oz [185.0 g]
What's in the Box		
	Included in Package	1 - M.2 SSD Enclosure
		1 - USB-C to USB-C Cable
		1 - USB-A to USB-C Cable
		1 - Drive Installation Screw Kit
		1 - Micro Screwdriver
		2 - Thermal Pads
		1 - Quick-Start Guide

^{*}Product appearance and specifications are subject to change without notice.