

1- M.2 NVME SSD ENCLOSURES

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TOPICS

- USB un-cooled enclosures versus USB actively-cooled enclosures

M.2 NVME SSD ADVICE

- Two types of M.2 NVME SSDs and enclosures:
SATA M.2 SSDs and enclosures are obsolete
NVME M.2 SSDs and enclosures are current.

M.2 NVME SSD ADVICE (continued)

- NVME M.2 SSDs are sometimes called "PCIe M.2 SSDs" and "PCIe M.2 enclosures".

This does not mean that they go into a PCIe slot:

A "PCIe M.2 SSD" inserts into an M.2 slot or an M.2 enclosure.

A "PCIe M.2 enclosure connects to a USB-C port which can be either a Thunderbolt or a USB 3 or a USB 4 port

M.2 NVME SSD ADVICE (continued)

- A SATA M.2 SSD will not work in a NVME enclosure
- A NVME M.2 SSD will not work in a SATA enclosure
- Do not buy a SATA M.2 SSD
- Do not buy a SATA M.2 enclosure
- Buy an NVME M.2 SSD and install it into a NVME M.2 enclosure that has a fan

M.2 NVME SSD ADVICE (continued)

- Active fan cooled enclosures are available at 3 speeds:
Chose 40 Gbps for future-proofing.
40 Gbps enclosures are backup compatible to the earlier 10 and 5 Gbps speeds

Thunderbolt3/4/USB 4.0

40Gbps

USB3.2/USB3.1 Gen2

10Gbps

USB 3.0

5Gbps

M.2 NVME SSD ADVICE (continued)

- Make sure that the SSD or enclosure that you buy says "NVME", if it does not, it is using the older "SATA" technology which is obsolete and slower

M.2 NVME SSD ADVICE (continued)

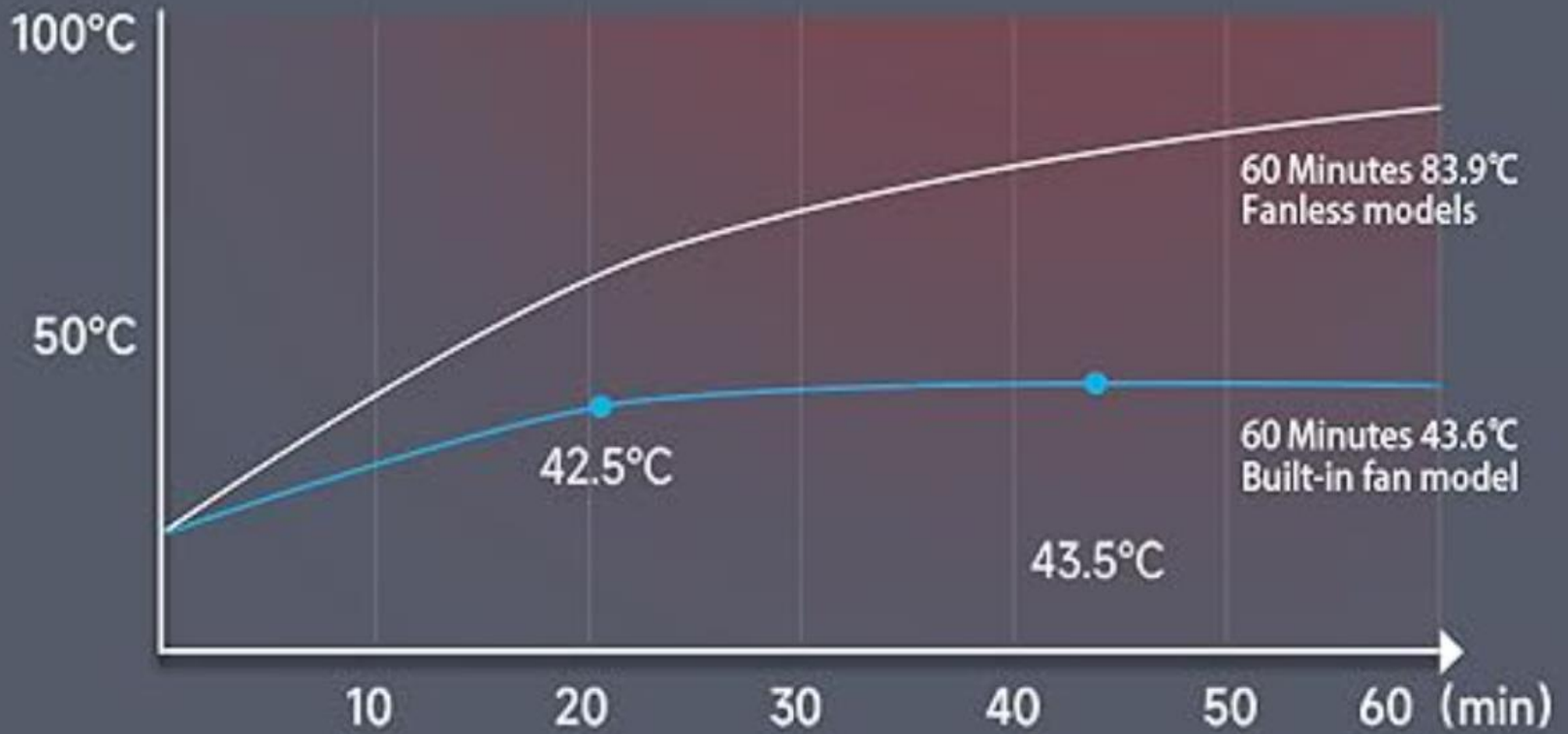
- Ignore claims by sellers of enclosures that fan-less enclosures are adequate for cooling M.2 SSDs.

M.2 NVME SSD ADVICE (continued)

- Active fan cooled enclosures reduce the temperature of M.2 SSDs during heavy continued use as shown at https://www.amazon.com/dp/B0BHYZFVKX?ref=ppx_yo2ov_dt_b_product_details&th=1

Built-in fan model

Fanless models



M.2 NVME SSD ADVICE (continued)

- Beware of M.2 enclosures that do not have a fan since they will always run hotter than the ones that have a fan
- An example of a fan-less enclosure that I do not recommend can be seen at
- <https://www.amazon.com/dp/B0B13TSJZQ/>

M.2 NVME SSD ADVICE (continued)

- The best M.2 enclosures will still be the ones that you build from a kludge of parts

ACASIS NVME M.2 ENCLOSURE

- <https://www.amazon.com/Enclosure-Cooling-Installation-M1-Compatible/dp/B0C8CZB5S7/>

ANOTHER NVME M.2 ENCLOSURE

- <https://www.amazon.com/NFHK-Type-C-Enclosure-20Gbps-Adapter/dp/B0BP259CSK/>

STILL ANOTHER NVME M.2 ENCLOSURE

- <https://www.amazon.com/dp/B0CZHJSM7P/>

