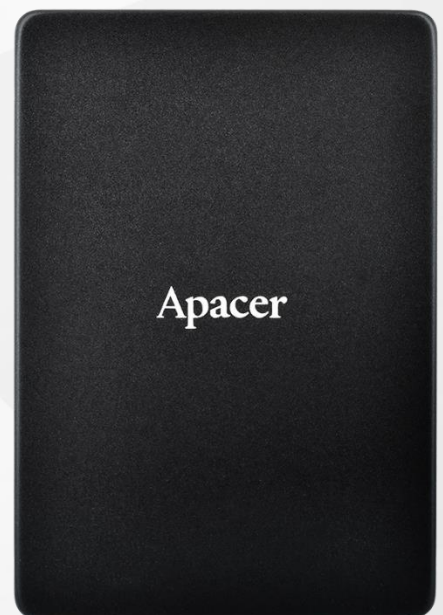


# Apacer

The Most **Reliable**  
Storage For Industries

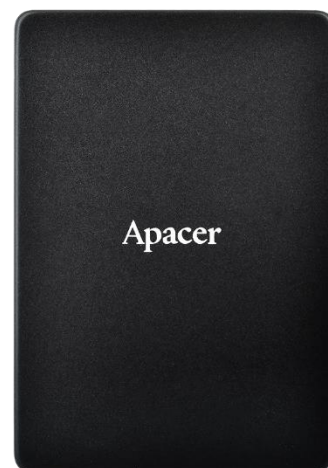
PV140-25



## PV140-25

### Overview

Apacer PV140-25 is the fastest Solid State Drive (SSD) designed with U.2 mechanical dimensions, providing full compliance with PCIe Gen3 x4 interface and NVMe 1.3 specifications. Built with a powerful PCIe controller, PV140-25 delivers outstanding performance in data transfer, reaching up to 687,000/254,000 and 3,405/1,100 MB/s in IOPS and sequential read/write. PV140-25 utilizes 3D NAND for higher capacity up to 7,680GB, making it the ideal choice for rugged, embedded applications.



Regarding reliability, PV140-25 is implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability. For highly-intensive applications, End-to-End Data Protection ensures that data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers, while Advanced Encryption Standard (AES) ensures data security and provides users with a peace of mind knowing their data is safeguarded at all times.

\* The actual available memory on the device is less than what is listed on the package. This is due to small discrepancies in file formats and algorithms used by various operating systems. In addition, a portion of memory space is reserved for system files and data sectors for better performance.

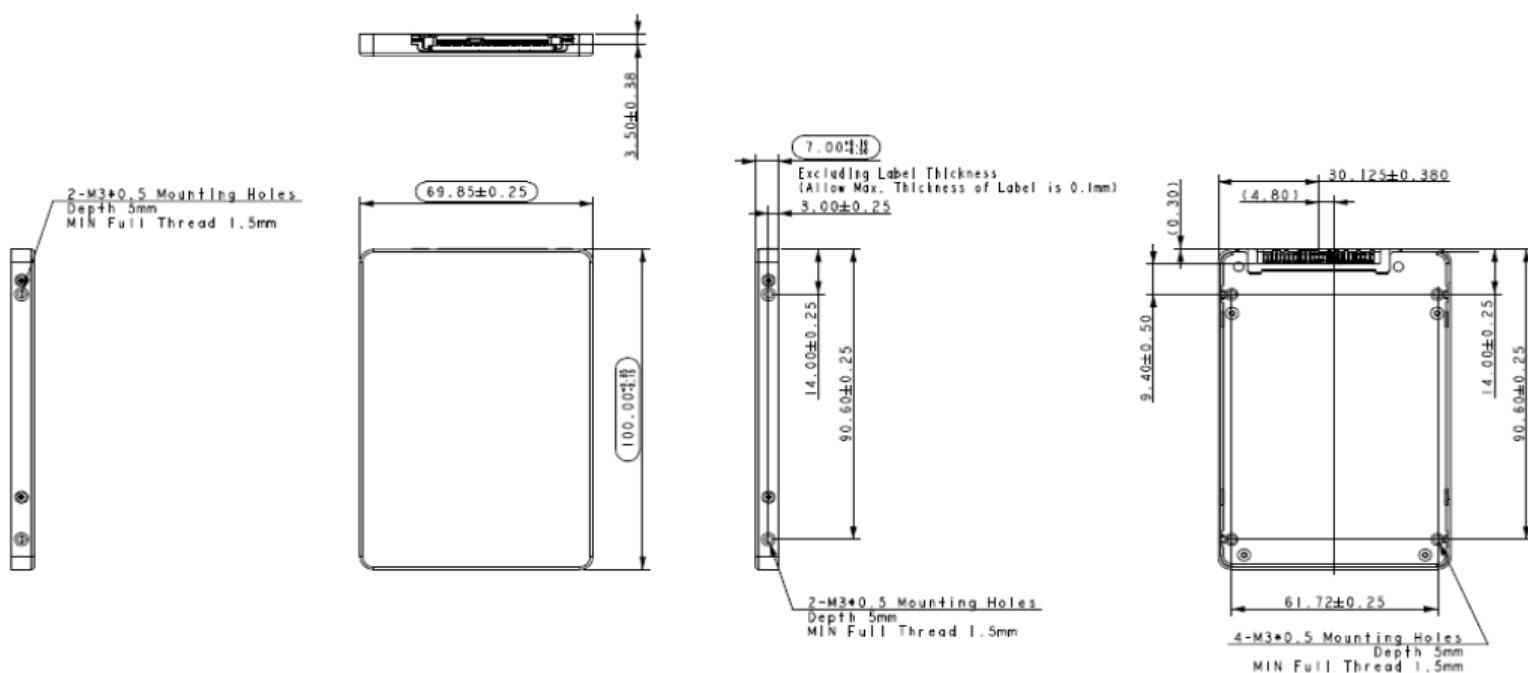
## Feature

- Adopts advanced LDPC ECC engine with 3D NAND flash memory to improve reliability
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- Supports SSDWidget S.M.A.R.T function
- Power Failure Management
- AES 256-bit hardware encryption
- End-to-End Data Protection
- TRIM Support
- Over-Provisioning
- SMART Read Refresh™
- NVMe Secure Erase

## Specifications

Model	PV140-25
Interface	PCIe Gen3 x4
Connector	U.2 (SFF-8639)
Form Factor	2.5"
NAND Flash Type	3D TLC
Capacity	960GB ~ 7680GB
External DRAM	Yes
Sustained Read Performance (MB/sec)	Up to 3405
Sustained Write Performance (MB/sec)	Up to 1100
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPs (4K Random Write)	254K
Standard Operating Temperature ( °C )	0 ~ + 70
Extended Operating Temperature ( °C )	-40 ~ + 85
Storage Temperature ( °C )	-40 ~ + 85
Thermal Sensor	Yes
Shock	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
Vibration	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02 Grms, 15~2000 Hz/random (compliant with MIL-STD-810G)
Operating Voltage	12 V ± 5%
Power Consumption	Active mode: 670 mA / Idle mode: 200 mA
Dimension (L x W x H)	100.00 x 69.85 x 7.00 (mm)
MTBF (hours)	>3,000,000

## Mechanical Specification



Unit: mm

For more information,  
contact your Apacer representative

## Global Presence

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