

Apacer



*Rugged
Series*

Rugged Systems for Mission-critical Applications

Delivering Reliability When Every Moment Counts



Built for rugged applications, these systems endure extreme conditions with resistance to temperature, altitude, and humidity, plus anti-vibration and shock protection, ensuring high reliability and performance in mission-critical scenarios.



Enhanced Data Security

FIPS 140-2 certified cryptographic modules safeguard sensitive data, ensuring compliance with strict security standards.



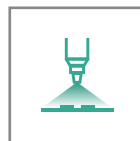
Power Failure Protection

DataDefender™ detects abnormal power events, preventing data loss during outages or fluctuations.



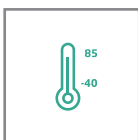
Unmatched Corrosion Resistance

Patented anti-sulfuration memory and SSDs deliver industry-leading anti-corrosion protection for harsh environments.



Improved Product Durability

Conformal coating protects devices from dust and liquids, enhancing reliability in challenging conditions.



Reliable Extreme Temperature Performance

Wide temperature support (-40°C to 85°C) ensures stable operation in extreme climates.



Strengthened Vibration Resistance

Sidefill technology reinforces solder joints for vibration resistance and improves heat dissipation to prevent damage.

Product Specification

				
Model Name	SV24D-25	SV24D-M280	PV25D-M242	PV25D-M280
Form Factor	2.5"	M.2 2280	M.2 2242	M.2 2280
Interface	SATA 3.2 (6Gb/s)	SATA 3.2 (6Gb/s)	PCIe Gen4 x4	PCIe Gen4 x4
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	120GB~1920GB	120GB~1920GB	240GB~1920GB	240GB~1920GB
Max. Sequential R/W (MB/sec.)	560/495	560/495	3325/3020	3325/3020
Max. Random R/W (IOPS)	85K	85K	559K	559K
External DRAM Buffer	Yes	Yes	Yes	Yes
Operating Temperature (°C)	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C	STD: 0°C ~ 70°C WT: -40°C ~ 85°C

Product Specification

				
Model Name	DDR4 XR-DIMM	GraTherX™ DDR5 SODIMM	DDR5 Wide Temperature SODIMM	DDR5 Anti-sulfuration SODIMM
Module Type	XR-DIMM	SODIMM	Wide Temperature SODIMM	Anti-sulfuration SODIMM
Memory Technology	DDR4	DDR5	DDR5	DDR5
Speed	2133/2400	4800/5600	4800/5600	4800/5600
Density	8GB/16GB	8GB/16GB/ 32GB/48GB	8GB/16GB/32GB	8GB/16GB/ 32GB/48GB
Voltage	1.2v	1.1v	1.1v	1.1v
Pin Count	300-Pin	262-Pin	262-Pin	262-Pin
Width	64-Bit / 72-Bit	64-Bit	64-Bit	64-Bit
PCB Height	1.466"	1.18"	1.18"	1.18"
Operating Temperature (°C)	TC: 0°C ~ 85°C / -40°C ~ 85°C	TC: 0°C ~ 85°C	TC: -40°C ~ 85°C	TC: 0°C ~ 85°C
Fully Lead-free Resistor	No	Yes	Yes	Yes