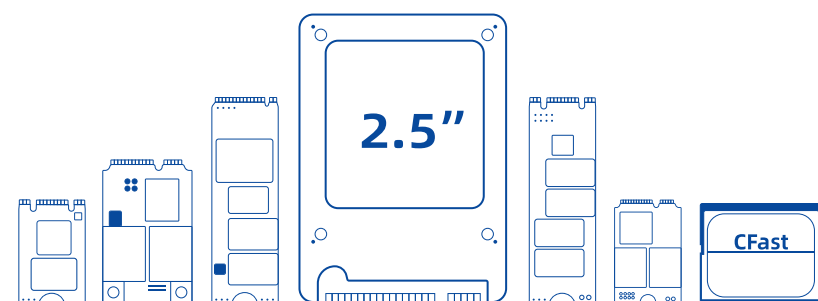


YANSEN®

One Stop Industrial Storage Solution



One Stop Industrial Storage Solution



Website



LinkedIn

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INDUSTRIAL / ENTERPRISE STORAGE SOLUTIONS

Shenzhen KingSpec Electronics Technology Co., Ltd.

Company Mission and Vision

Mission

To be the custodian of global data
and the protector of data security.

Vision

To establish a reliable platform, advance in innovation,
and nurture talent.

Fostering collaboration between partners and KingSpec's
employees to create value together.

Values

- Striving with Integrity.
- Honesty and Reliability.
- Embracing Challenges.

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About YANSEN

Shenzhen Kingspec Electronics Technology Co., Ltd.

Kingspec is a leading semiconductor storage brand established in 2007, specializing in the R&D, design, manufacturing, and sales of innovative storage solutions. Committed to diversification, customization, and high quality, the company delivers premium and high-performance hardware products to global clients.

The company operates YANSEN for industrial storage solutions and KingSpec for consumer storage solutions. The products span five major categories: embedded storage modules, SSDs, portable storage devices, memory modules, and memory cards. These products are widely applied in mainstream consumer electronics (e.g., smartphones, computers, audiovisual equipment, and home entertainment devices), as well as in data centers, automotive electronics, rail transit, security surveillance, and industrial control systems.



YANSEN has emerged as a premier provider of industrial and enterprise-grade solid-state storage solutions. Each solution integrates cutting-edge technologies such as wide temperature operation (-40°C to 85°C), conformal coating, power-loss protection, and AES-256 encryption, ensuring data integrity across the most challenging deployment scenarios. YANSEN serves as the storage backbone for automation, transportation, AI Robot, medical/healthcare, server/cloud computing and In-vehicle.

With R&D centers and manufacturing hubs in China, complemented by overseas logistics facilities in Hong Kong, Japan, the U.S., and Europe, KingSpec has built a dual-circulation supply chain integrating domestic and international operations. This framework supports its global expansion strategy, enabling “brand globalization” and “service globalization” while fostering mutually beneficial partnerships with enterprises worldwide.

2007

Founded in 2007.

5000

The Total Area of Production Workshop is 5000m².

12,000,000

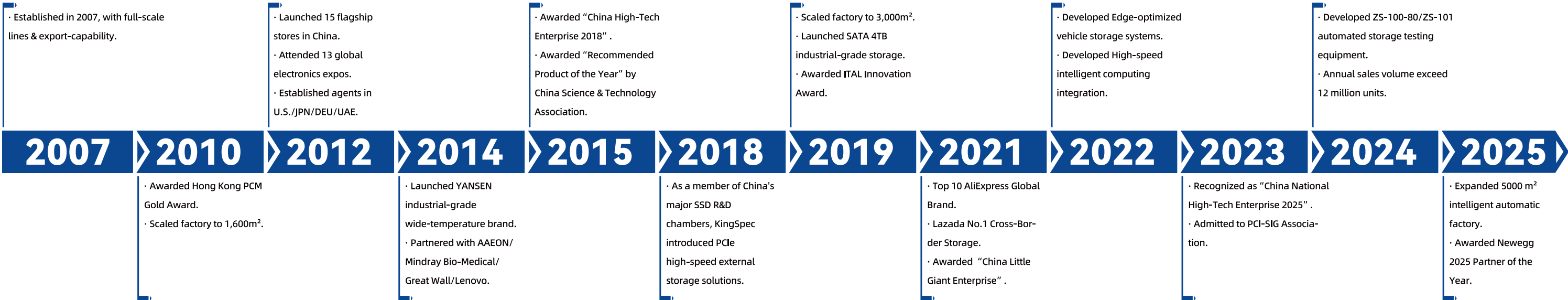
Annual Sales Volume 12 million pcs.



We Don't Just Store Bits We Accelerate Futures.

Written in NAND, Proven in Time.

Eighteen winters. Five continents. Countless sunrises where our technology wakes before the users do. Your toughest storage challenges shaped our milestones.



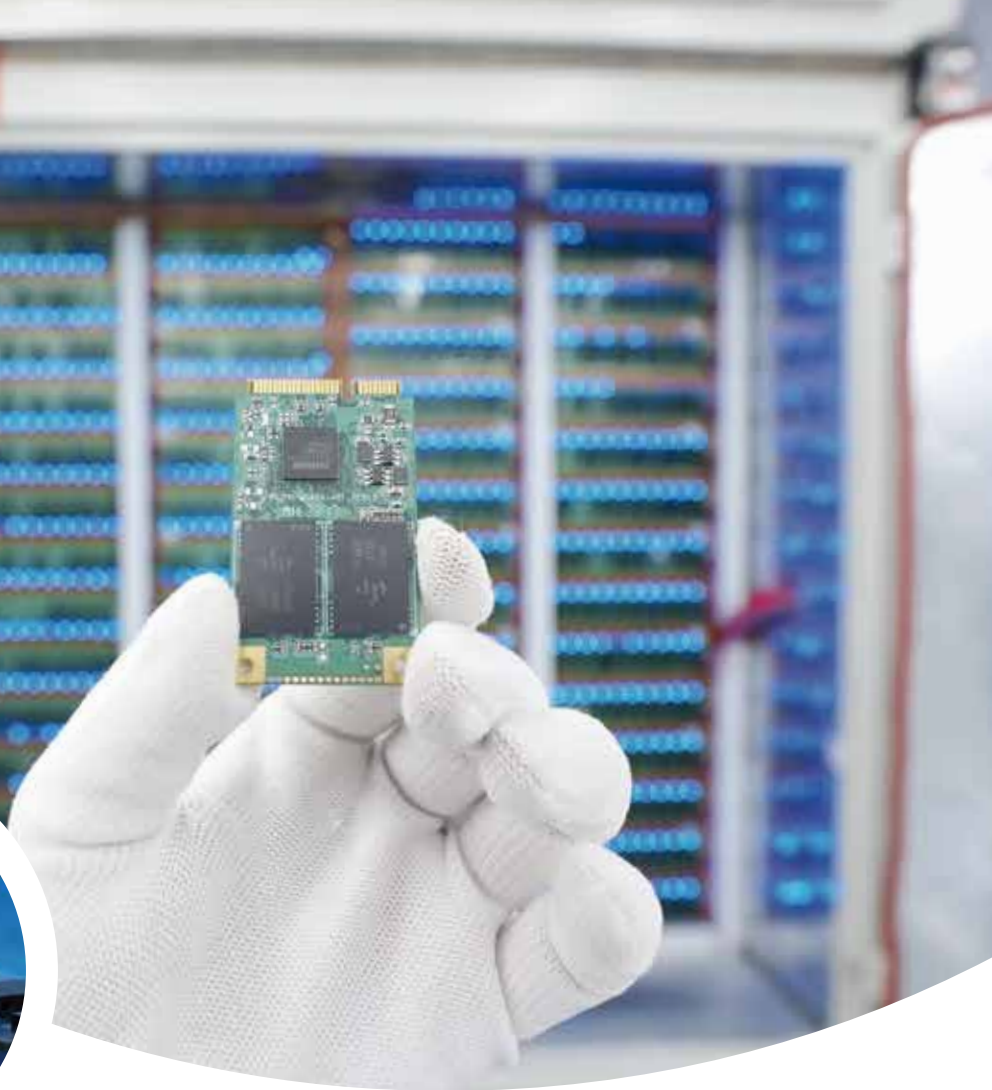
Innovative.
Advanced.
Reliable.
Efficient.



Complete Storage Portfolio
Engineered for Industrial Need
Precision-Crafted Solutions

Core Competencies

- ▶ With 18 years of expertise in SSD manufacturing, we possess mature R&D and production capabilities, backed by a profound corporate culture.
- ▶ Industry Applications: Industrial Automation, Server, Transportation, Surveillance, Financing, AIoT/IoT, Medical.
- ▶ Our team comprises seasoned professionals across design, R&D, production, and sales, ensuring end-to-end excellence.
- ▶ A robust supply chain system with readily available inventory guarantees stable deliveries and optimal timeliness for customers.
- ▶ We strategically operate 5 specialized storage brands to serve diverse markets and customers:
 - ▶ **KingSpec:** Consumer-grade storage solutions.
 - ▶ **YANSEN:** Industrial-grade wide-temperature storage solutions.
 - ▶ **ONEBOOM:** Gaming storage solutions.
 - ▶ **MemoStone:** Portable storage solutions.
 - ▶ **MIXAGE:** Memory Cards.



Research & Development (R&D) Team

KingSpec's R&D team combines hardware and software engineering expertise to develop customized storage solutions optimized for diverse applications. KingSpec's technical capabilities include advanced encryption technology, physical destruction mechanisms, power loss protection systems, and custom-printed circuit board designs. This comprehensive engineering approach enables us to create tailored solutions that meet the most demanding technical specifications across industrial, commercial, and specialized application scenarios.

Reliability Verification & Testing

KingSpec provides customized application scenario simulation testing, including wide-temperature, salt spray, shock, drop, vibration, power failure, compatibility, and continuous read/write endurance evaluations. KingSpec's complete product portfolio complies with international certifications such as FCC, CE, RoHS, REACH, and WEEE, ensuring unified quality standards for product delivery.

Technical Support & Rapid Response

KingSpec's professional pre-sales and after-sales technical support team ensures prompt response to customer needs, seamlessly integrated with our comprehensive production system to guarantee on-time product delivery and earn customer satisfaction and trust.

Customized Service

KingSpec delivers tailored services including application-specific testing, system design, functional customization, and aesthetic personalization to provide secure and reliable solutions for diverse industry requirements. KingSpec is dedicated to provide safe, reliable, and suitable products to customers. Supporting Data Encryption, Quick Erase, Conformal Coating, Wide Temperature, Customized PCB.

Strict Quality Management

KingSpec implements a rigorous quality management system that strictly complies with ISO9001 standards throughout the entire product lifecycle - from material procurement and R&D verification (including DVT and DVT) to mass production and final delivery. KingSpec's process ensures 100% quality control of core materials, comprehensive production tracking, and thorough verification of both products and packaging.

Global Market



USA



Russia



UK



Japan



Korea



Brazil



Germany



Italy



France



Netherlands

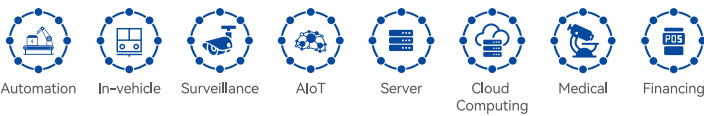
Enterprise Honors & Certifications

- ▶ EGGIE AWARD-2025 Partner of the Year (Newegg).
- ▶ National High-Tech Enterprise (3 consecutive terms).
- ▶ National-Level “Little Giant” Enterprise.
- ▶ 2024 Shenzhen Famous Brand & Greater Bay Area Renowned Brand.
- ▶ Industrial Control Innovation Excellence Award.
- ▶ Top 3 SSD Brands in China.
- ▶ Industry-Academia Partner - South China University of Technology.
- ▶ Shenzhen Industrial Automation Association.
- ▶ ISO 9001 Certified - International Quality Standard.
- ▶ Customs Advanced Certification Enterprise.



2.5" SATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support SATAII 3 Gb/s , SATAI 1.5Gb/s
- ◆ Hot-Swappable
- ◆ End-to-end Data Protection
- ◆ Low Power Consumption



Model	YSS25S2XS	YSS25S2XM	YSS25M5XT	YSS25P2XT	YSS25P1XT	YSS25G1XD
Flash Type	SLC	MLC	TLC	TLC	TLC	TLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	8GB~32GB	32GB~256GB	128GB~2TB	256GB~4TB	128GB~1TB	960GB~7.68TB
Sequential Read (MAX)	Up to 530MB/s	Up to 530MB/s	Up to 560MB/s	Up to 560MB/s	Up to 560MB/s	Up to 560MB/s
Sequential Write (MAX)	Up to 370MB/s	Up to 380MB/s	Up to 520MB/s	Up to 530MB/s	Up to 510MB/s	Up to 540MB/s
4K Random Read	21700 IOPS	21700 IOPS	60000 IOPS	47000 IOPS	70000 IOPS	95000 IOPS
4K Random Write	21900 IOPS	21900 IOPS	75000 IOPS	90000 IOPS	81000 IOPS	50000 IOPS
TBW	375~1500TB	90~750TB	125~2000TB	250~2000TB	30~1000TB	1000~8000TB
Power Consumption (MAX)	2.0W	2.0W	1.15W	1.15W	1.25W	4.5W
MTBF	2 million hours					
Shock	1500G/0.5ms					
Vibration	80Hz~2000Hz/20G					
Operating Voltage	DC 5V±5%					
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C					0°C~70°C
Storage Temperature	-55°C~105°C					
Humidity	5%~95% RH non-condensing					
Dimensions	L100.4mm*W70mm*H7.0mm±0.15mm					

Special Features						
Power Loss Protection (PLP)	○	○	○	○	○	○
Write Protection	○	○	○	○	○	●
Quick Erase	○	○	●	○	○	○
AES 256 Encryption	○	○	○	○	○	●
External DRAM	○	○	○	○	○	●

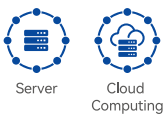
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

2.5" U.2 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe1.4
- ◆ Hot-Swappable
- ◆ End-to-end Data Protection
- ◆ Low Power Consumption



Model	YSNU2T1KE
Flash Type	eTLC
Interface	U.2
Capacity	1.6TB~7.68TB
Sequential Read (MAX)	Up to 7100MB/s
Sequential Write (MAX)	Up to 3400MB/s
4K Random Read	1040000 IOPS
4K Random Write	330000 IOPS
DWPD	1 or 3
Power Consumption (MAX)	< 12W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 12V±10%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C~85°C
Humidity	5%~95% RH non-condensing
Dimensions	L100.25mm*W69.85mm*H11.75mm±0.25mm

Special Features	
Power Loss Protection (PLP)	●
Write Protection	○
Quick Erase	○
AES 256 Encryption	●
External DRAM	●

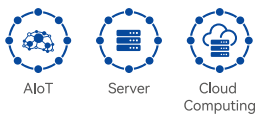
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

E1.S SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe1.4
- ◆ Hot-Swappable
- ◆ End-to-end Data Protection
- ◆ Low Power Consumption



Model	YSNE1T1KE
Flash Type	eTLC
Interface	E1.S PCIe Gen4 x 4Lane
Capacity	1.6TB~7.68TB
Sequential Read (MAX)	Up to 7100MB/s
Sequential Write (MAX)	Up to 3400MB/s
4K Random Read	1070000 IOPS
4K Random Write	270000 IOPS
DWPD	1 or 3
Power Consumption (MAX)	< 12W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 12V±10%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C~85°C
Humidity	5%~95% RH non-condensing
Dimensions	L118.75mm*W33.75mm*H19.5mm±0.55mm

Special Features	
Power Loss Protection (PLP)	●
Write Protection	○
Quick Erase	○
AES 256 Encryption	●
External DRAM	●

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

AIC Full SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe1.4
- ◆ End-to-end Data Protection
- ◆ Low Power Consumption



Model	YSNA1T1KE
Flash Type	eTLC
Interface	Full AIC PCIe Gen4 x 4Lane
Capacity	1.6TB~7.68TB
Sequential Read (MAX)	Up to 7100MB/s
Sequential Write (MAX)	Up to 3400MB/s
4K Random Read	1070000 IOPS
4K Random Write	270000 IOPS
DWPD	1 or 3
Power Consumption (MAX)	< 12W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 12V±10%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C~85°C
Humidity	5%~95% RH non-condensing
Dimensions	L167.65mm*W120.02mm*H21.59mm±0.25mm

Special Features	
Power Loss Protection (PLP)	●
Write Protection	○
Quick Erase	○
AES 256 Encryption	●
External DRAM	●

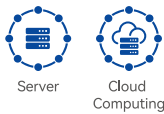
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

AIC Half SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe1.4
- ◆ End-to-end Data Protection
- ◆ Low Power Consumption



Model	YSNA2T1KE
Flash Type	eTLC
Interface	Half AIC PCIe Gen4 x 4Lane
Capacity	1.6TB~7.68TB
Sequential Read (MAX)	Up to 7100MB/s
Sequential Write (MAX)	Up to 3400MB/s
4K Random Read	1070000 IOPS
4K Random Write	270000 IOPS
DWPD	1 or 3
Power Consumption (MAX)	< 12W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 12V±10%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C~85°C
Humidity	5%~95% RH non-condensing
Dimensions	L167.65mm*W79.20mm*H21.59mm±0.25mm

Special Features	
Power Loss Protection (PLP)	●
Write Protection	○
Quick Erase	○
AES 256 Encryption	●
External DRAM	●

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

2.5" PATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / Garbage collection
- ◆ Over-provisioning
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Managemente
- ◆ Selectable SLC/MLC
- ◆ DRAM-Less
- ◆ Industrial Wide Temperature



Model	YSP25S1XS	YSP25S1XM
Flash Type	SLC	MLC
Interface	PATA	PATA
Capacity	8GB~64GB	16GB~128GB
Sequential Read (MAX)	Up to 120MB/s	Up to 125MB/s
Sequential Write (MAX)	Up to 100MB/s	Up to 100MB/s
4K Random Read	2500 IOPS	2500 IOPS
4K Random Write	500 IOPS	500 IOPS
TBW	375~3000TB	45~375TB
Power Consumption (MAX)	1.6W	1.6W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 5.0V±10%	
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	
Storage Temperature	-55°C~105°C	
Humidity	5%~95% RH non-condensing	
Dimensions	L100mm*W69.8mm*H9.6mm±0.15mm	

Special Features	
Power Loss Protection (PLP)	○
Write Protection	○
Quick Erase	○
AES 256 Encryption	○
External DRAM	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

mSATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Hot-Swappable
- ◆ DRAM-Less



Model	YSSM1P2XT	YSSM1S2XS	YSSM1S2XM	YSSM1M5XT	YSSM1P1XX
Flash Type	TLC	SLC	MLC	TLC	TLC
Interface	mSATA	mSATA	mSATA	mSATA	mSATA
Capacity	128GB~2TB	8GB~32GB	32GB~256GB	128GB~2TB	32GB~1TB
Sequential Read (MAX)	Up to 560MB/s	Up to 300MB/s	Up to 550MB/s	Up to 560MB/s	Up to 510MB/s
Sequential Write (MAX)	Up to 550MB/s	Up to 200MB/s	Up to 250MB/s	Up to 550MB/s	Up to 460MB/s
4K Random Read	46000 IOPS	21000 IOPS	21000 IOPS	60000 IOPS	70000 IOPS
4K Random Write	90000 IOPS	22000 IOPS	22000 IOPS	75000 IOPS	81000 IOPS
TBW	250~2000TB	375~1500TB	90~750TB	125~2000TB	30~1000TB
Power Consumption (MAX)	0.71W	2.01W	2.01W	0.81W	1.66W
MTBF	2 million hours				
Shock	1500G/0.5ms				
Vibration	80Hz~2000Hz/20G				
Operating Voltage	DC 3.3V±5%				
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C				
Storage Temperature	-55°C~105°C				
Humidity	5%~95% RH non-condensing				
Dimensions	L50.95mm*W30.0mm*H3.5mm±0.15mm				

Special Features					
Power Loss Protection (PLP)	○	○	○	○	○
Write Protection	○	○	○	○	○
Quick Erase	○	○	○	○	●
AES 256 Encryption	○	○	○	○	○
External DRAM	○	○	○	○	○

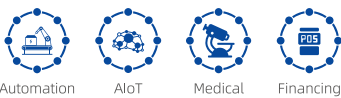
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

Half mSATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Hot-Swappable
- ◆ Anti-Sulfuration applicable



Model	YSSHSM5XT
Flash Type	TLC
Interface	Half-slim
Capacity	32GB~1TB
Sequential Read (MAX)	Up to 560MB/s
Sequential Write (MAX)	Up to 550MB/s
4K Random Read	84100 IOPS
4K Random Write	15000 IOPS
TBW	30~1000TB
Power Consumption (MAX)	1.03W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 3.3V±5%
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C
Storage Temperature	-55°C~105°C
Humidity	5%~95% RH non-condensing
Dimensions	L26.8mm*W29.9mm*H3.5mm±0.15mm

Special Features	
Power Loss Protection (PLP)	○
Write Protection	○
Quick Erase	○
AES 256 Encryption	○
External DRAM	○

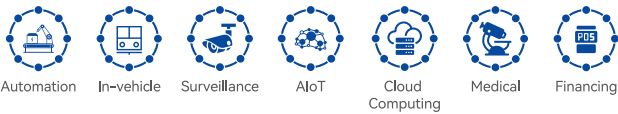
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 2242 SATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Hot-Swappable
- ◆ DRAM-Less



Model	YSSN1M5XT	YSSN1P2XT	YSSN1P1XT
Flash Type	TLC	TLC	TLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	128GB~1TB	256GB~1TB	32GB~512GB
Sequential Read (MAX)	Up to 550MB/s	Up to 550MB/s	Up to 550MB/s
Sequential Write (MAX)	Up to 530MB/s	Up to 530MB/s	Up to 470MB/s
4K Random Read	54000 IOPS	62000 IOPS	70000 IOPS
4K Random Write	72000 IOPS	81000 IOPS	81000 IOPS
TBW	125~1000TB	250~1000TB	30~500TB
Power Consumption (MAX)	0.95W	0.67W	1.54W
MTBF	2 million hours		
Shock	1500G/0.5ms		
Vibration	80Hz~2000Hz/20G		
Operating Voltage	DC 3.3V±5%		
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C		
Storage Temperature	-55°C~105°C		
Humidity	5%~95% RH non-condensing		
Dimensions	L42.0mm*W22.0mm*H3.5mm±0.15mm		

Special Features			
Power Loss Protection (PLP)	○	○	○
Write Protection	○	○	○
Quick Erase	○	○	○
AES 256 Encryption	○	○	○
External DRAM	○	○	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 2280 SATA SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Hot-Swappable
- ◆ DRAM-Less



Model	YSSN3M5XT	YSSN3P2XT	YSSN3P1XT
Flash Type	TLC	TLC	TLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	128GB~2TB	256GB~1TB	32GB~1TB
Sequential Read (MAX)	Up to 550MB/s	Up to 550MB/s	Up to 550MB/s
Sequential Write (MAX)	Up to 530MB/s	Up to 530MB/s	Up to 470MB/s
4K Random Read	60000 IOPS	47000 IOPS	69000 IOPS
4K Random Write	75000 IOPS	90000 IOPS	81000 IOPS
TBW	125~2000TB	250~2000TB	30~1000TB
Power Consumption (MAX)	1.14W	0.69W	1.62W
MTBF	2 million hours		
Shock	1500G/0.5ms		
Vibration	80Hz~2000Hz/20G		
Operating Voltage	DC 3.3V±5%		
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C		
Storage Temperature	-55°C~105°C		
Humidity	5%~95% RH non-condensing		
Dimensions	L80.0mm*W22.0mm*H2.1mm±0.15mm		

Special Features			
Power Loss Protection (PLP)	○	○	○
Write Protection	○	○	○
Quick Erase	○	○	○
AES 256 Encryption	○	○	○
External DRAM	○	○	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 PCIe3.0 2280 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe 1.4
- ◆ Thermal Sensor
- ◆ Industrial Wide Temperature



Model	YSNN5M3XT
Flash Type	TLC
Interface	M.2 2280 M Key PCIe Gen3 x 4Lane
Capacity	128GB~2TB
Sequential Read (MAX)	Up to 3400MB/s
Sequential Write (MAX)	Up to 3100MB/s
4K Random Read	380000 IOPS
4K Random Write	320000 IOPS
TBW	125~2000TB
Power Consumption (MAX)	4.26W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 3.3V±5%
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C
Storage Temperature	-55°C~105°C
Humidity	5%~95% RH non-condensing
Dimensions	L80.0mm*W22.0mm*H2.1mm±0.15mm

Special Features	
Power Loss Protection (PLP)	○
Write Protection	○
Quick Erase	●
AES 256 Encryption	○
External DRAM	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 PCIe3.0 2242 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe 1.4
- ◆ Super Read/Write Performance
- ◆ Thermal Sensor
- ◆ Industrial Wide Temperature



Model	YSNN2M3XT
Flash Type	TLC
Interface	M.2 2242 M Key PCIe Gen3 x 4Lane
Capacity	128GB~2TB
Sequential Read (MAX)	Up to 3500MB/s
Sequential Write (MAX)	Up to 3000MB/s
4K Random Read	420000 IOPS
4K Random Write	250000 IOPS
TBW	125~2000TB
Power Consumption (MAX)	4.19W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 3.3V±5%
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C
Storage Temperature	-55°C~105°C
Humidity	5%~95% RH non-condensing
Dimensions	L42.0mm * W22.0mm * H3.5mm±0.15mm

Special Features	
Power Loss Protection (PLP)	○
Write Protection	○
Quick Erase	○
AES 256 Encryption	○
External DRAM	○

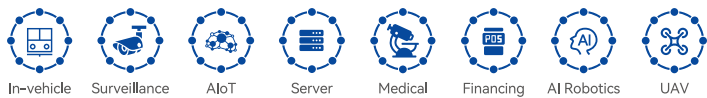
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 PCIe4.0 2280 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe
- ◆ Thermal Sensor



Model	YSNN5M7XT	YSNN5T1KE
Flash Type	TLC	eTLC
Interface	M.2 2280 M Key PCIe Gen4 x 4Lane	M.2 2280 M Key PCIe Gen4 x 4Lane
Capacity	256GB~4TB	400GB~3.84TB
Sequential Read (MAX)	Up to 7400MB/s	Up to 7000MB/s
Sequential Write (MAX)	Up to 6500MB/s	Up to 2400MB/s
4K Random Read	650000 IOPS	880000 IOPS
4K Random Write	670000 IOPS	95000 IOPS
TBW/DWPD	TBW:500~4000TB	DWPD:1 or 3
Power Consumption (MAX)	4.56W	8W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 3.3V±5%	
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	0°C~70°C
Storage Temperature	-55°C~105°C	-40°C~85°C
Humidity	5%~95% RH non-condensing	
Dimensions	L80.0mm*W22.0mm*H2.1mm±0.15mm	

Special Features		
Power Loss Protection (PLP)	○	●
Write Protection	○	○
Quick Erase	●	○
AES 256 Encryption	○	●
External DRAM	○	●

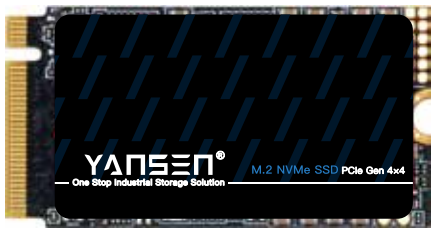
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 PCIe4.0 2242 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe 2.0
- ◆ Thermal Sensor



Model	YSNN2M7XT
Flash Type	TLC
Interface	M.2 2242M Key PCIe Gen4 x 4Lane
Capacity	256GB~1TB
Sequential Read (MAX)	Up to 5100MB/s
Sequential Write (MAX)	Up to 4500MB/s
4K Random Read	400000 IOPS
4K Random Write	630000 IOPS
TBW	250~1000TB
Power Consumption (MAX)	4.82W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 3.3V±5%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C~85°C
Humidity	5%~95% RH non-condensing
Dimensions	L42.0mm * W22.0mm * H3.5mm±0.15mm

Special Features	
Power Loss Protection (PLP)	○
Write Protection	○
Quick Erase	○
AES 256 Encryption	○
External DRAM	○

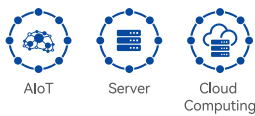
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

M.2 PCIe4.0 22110 SSD

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support NVMe 1.4
- ◆ Thermal Sensor



Model	YSNN6T1KE
Flash Type	eTLC
Interface	M.2 22110 M Key PCIe Gen4 x 4Lane
Capacity	800GB~7.68TB
Sequential Read (MAX)	Up to 7100MB/s
Sequential Write (MAX)	Up to 2500MB/s
4K Random Read	916000 IOPS
4K Random Write	95000 IOPS
DWPD	1 or 3
Power Consumption (MAX)	< 8W
MTBF	2 million hours
Shock	1500G/0.5ms
Vibration	80Hz~2000Hz/20G
Operating Voltage	DC 3.3V±5%
Operating Temperature	0°C~70°C
Storage Temperature	-40°C ~ 85°C
Humidity	5%~95% RH non-condensing
Dimensions	L110.0mm*W22.0mm*H3.5mm±0.15mm

Special Features	
Power Loss Protection (PLP)	●
Write Protection	○
Quick Erase	○
AES 256 Encryption	○
External DRAM	●

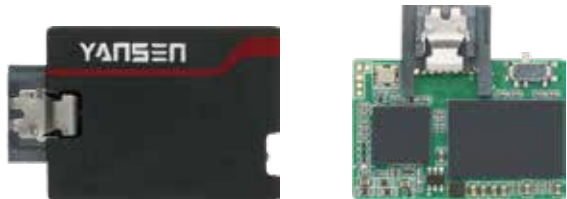
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

SATA DOM

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Hot-Swappable



Model	YSSD6P1XT	YSSD6P2XT
Flash Type	TLC	TLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	32GB~256GB	128GB~1TB
Sequential Read (MAX)	Up to 520MB/s	Up to 510MB/s
Sequential Write (MAX)	Up to 450MB/s	Up to 480MB/s
4K Random Read	58000 IOPS	58000 IOPS
4K Random Write	77000 IOPS	77000 IOPS
TBW	30~250TB	125~1000TB
Power Consumption (MAX)	0.88W	0.88W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 5V±5%	
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	
Storage Temperature	-40°C~85°C	
Humidity	5%~95% RH non-condensing	
Dimensions	L33.6mm*W30.6mm*H4.5mm±0.15mm	

Special Features		
Power Loss Protection (PLP)	○	○
Write Protection	○	○
Quick Erase	○	○
AES 256 Encryption	○	○
External DRAM	○	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

IDE DOM

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ IDE Protocol
- ◆ 40 Pin Vertical Dom
- ◆ Selectable SLC/MLC



Model	YSPV1S8XM	YSPV1S8XS
Flash Type	MLC	SLC
Interface	40PIN IDE DOM	40PIN IDE DOM
Capacity	8GB~64GB	8GB~32GB
Sequential Read (MAX)	Up to 70MB/s	Up to 110MB/s
Sequential Write (MAX)	Up to 45MB/s	Up to 95MB/s
4K Random Read	3800 IOPS	3200 IOPS
4K Random Write	438 IOPS	620 IOPS
TBW	20~175TB	375~3000TB
Power Consumption (MAX)	1.75W	1.75W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 5V±5%	
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	
Storage Temperature	-55°C ~ 105°C	
Humidity	5%~95% RH non-condensing	
Dimensions	L59.4mm*W27.45mm*H8.36mm height±0.5mm	

Special Features		
Power Loss Protection (PLP)	○	○
Write Protection	●	●
Quick Erase	○	○
AES 256 Encryption	○	○
External DRAM	○	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

Half slim

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management
- ◆ Support SATA II 3 Gb/s , SATA I 1.5Gb/s
- ◆ Hot-Swappable
- ◆ Anti-Sulfuration applicable



Model	YSSHSS2XS	YSSHSS2XM
Flash Type	SLC	MLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	8GB~32GB	16GB~256GB
Sequential Read (MAX)	Up to 550MB/s	Up to 550MB/s
Sequential Write (MAX)	Up to 460MB/s	Up to 370MB/s
4K Random Read	20000 IOPS	15000 IOPS
4K Random Write	36000 IOPS	30000 IOPS
TBW	375~1500TB	45~750TB
Power Consumption (MAX)	2.06W	2.06W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 5V+/-5%	
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	
Storage Temperature	-55°C~105°C	
Humidity	5%-95% RH non-condensing	
Dimensions	L54mm*W39mm*H4.5mm±0.7mm	

Special Features		
Power Loss Protection (PLP)	○	○
Write Protection	○	○
Quick Erase	○	○
AES 256 Encryption	○	○
External DRAM	○	○

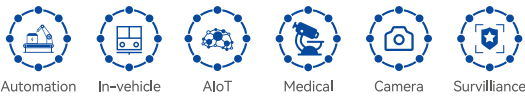
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

CF Card

- ◆ Wear Leveling / S.M.A.R.T. / Garbage collection
- ◆ Over-provisioning
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management



Model	YSPCFS1XS	YSPCFS1XM
Flash Type	SLC	MLC
Interface	CF 50PIN	CF 50PIN
Capacity	8GB~64GB	8GB~256GB
Sequential Read (MAX)	Up to 150MB/s	Up to 150MB/s
Sequential Write (MAX)	Up to 100MB/s	Up to 100MB/s
4K Random Read	3120 IOPS (128GB)	3120 IOPS (128GB)
4K Random Write	474 IOPS (128GB)	474 IOPS (128GB)
TBW	375~3000TB	20~375TB
Power Consumption (MAX)	0.99W (128GB)	0.99W (128GB)
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 3.3V+/-5%	
Operating Temperature	-40℃~85℃; -20℃~75℃; 0℃~70℃	
Storage Temperature	-55℃~105℃	
Humidity	5%~95% RH non-condensing	
Dimensions	L42.8mm*W36.4mm*H3.3mm±0.5mm	

Special Features		
Power Loss Protection (PLP)	○	○
Write Protection	○	○
Quick Erase	○	○
AES 256 Encryption	○	○
External DRAM	○	○

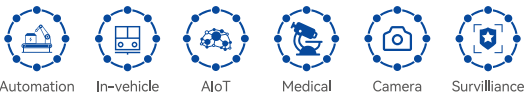
*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

CFast Card

- ◆ Wear Leveling / S.M.A.R.T. / TRIM / Garbage collection
- ◆ Over-provisioning / Secure Erase
- ◆ Native Command Queuing (NCQ) / Bad Block Management
- ◆ Intelligent Power Management



Model	YSSCSS2XS	YSSCSS2XM
Flash Type	SLC	MLC
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)
Capacity	8GB~32GB	16GB~256GB
Sequential Read (MAX)	Up to 550MB/s	Up to 550MB/s
Sequential Write (MAX)	Up to 460MB/s	Up to 370MB/s
4K Random Read	20000 IOPS	15000 IOPS
4K Random Write	36000 IOPS	30000 IOPS
TBW	375~1500TB	45~750TB
Power Consumption (MAX)	2.06W	2.06W
MTBF	2 million hours	
Shock	1500G/0.5ms	
Vibration	80Hz~2000Hz/20G	
Operating Voltage	DC 3.3V±5%	
Operating Temperature	-40℃~85℃; -20℃~75℃; 0℃~70℃	
Storage Temperature	-55℃ ~ 105℃	
Humidity	5%~95% RH non-condensing	
Dimensions	L42.8mm*W36.4mm*H3.3mm±0.5mm	

Special Features		
Power Loss Protection (PLP)	○	○
Write Protection	●	●
Quick Erase	●	●
AES 256 Encryption	○	○
External DRAM	○	○

*1. The read and write values may vary depending on different capacities and testing platforms.

*2. ● Available ○ Unavailable

*3. Customization is available for specific application.

DDR3 SODIMM

- Automation
- Industrial PC
- Retail terminal
- Digital Signage



Model	YS1600D3N
Memory Technology	DDR3
Frequency	1600MT/s
Capacity	4GB/8GB
Voltage	1.35V
Pin Count	204
Operating Temperature	0°C~70°C
Storage Temperature	-20°C~100°C

DDR3 UDIMM

- Automation
- Industrial PC



Model	YS1600D3P
Memory Technology	DDR3
Frequency	1600MT/s
Capacity	4GB/8GB
Voltage	1.35V
Pin Count	204
Operating Temperature	0°C~70°C
Storage Temperature	-20°C~100°C

DDR4 SODIMM

- Automation
- Industrial PC
- Retail terminal
- Digital Signage



Model	YS2133D4N	YS2666D4N
Memory Technology	DDR4	DDR4
Frequency	2133MT/s	2666MT/s
Capacity	4GB	4GB/8GB/16GB/32GB
Voltage	1.2V	1.2V
Pin Count	260	260
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	-40°C~85°C; -20°C~75°C; 0°C~70°C
Storage Temperature	-20°C~100°C	-20°C~100°C

DDR4 UDIMM

- Automation
- Industrial PC
- AIoT



Model	YS2666D4P	YS3200D4P
Memory Technology	DDR4	DDR4
Frequency	2666MT/s	3200MT/s
Capacity	4GB/8GB/16GB	8GB/16GB/32G
Voltage	1.2V	1.2V
Pin Count	260	260
Operating Temperature	-40°C~85°C; -20°C~75°C; 0°C~70°C	-40°C~85°C; -20°C~75°C; 0°C~70°C
Storage Temperature	-20°C~100°C	-20°C~100°C

Testing Equipment

ZS101 mini_V1



Key Features & Technical Specifications			
Multi-Interface Support	2.5" SATA	mSATA	M.2 form factors
Testing Capacity-Batch Testing Volume	80x SATA SSDs or		64x NVMe SSDs per single run
Remote Control & MonitoringRemote Access	Desktop control via remote connection		Network-based power on/off functionality
Data Management	Centralized storage of test results		Visualized data reporting
Customization	Software integration capabilities		Tailored solutions upon request
Advanced Testing CapabilitiesEnvironmental Testing	High-temperature stress testing support		
Power Management	Programmable power cycling for SSDs		
Software FeaturesUser Interface	Graphical UI (GUI) with multi-language support		
System Monitoring	Real-time system disk capacity alerts		

Testing Equipment

ZS1000-80



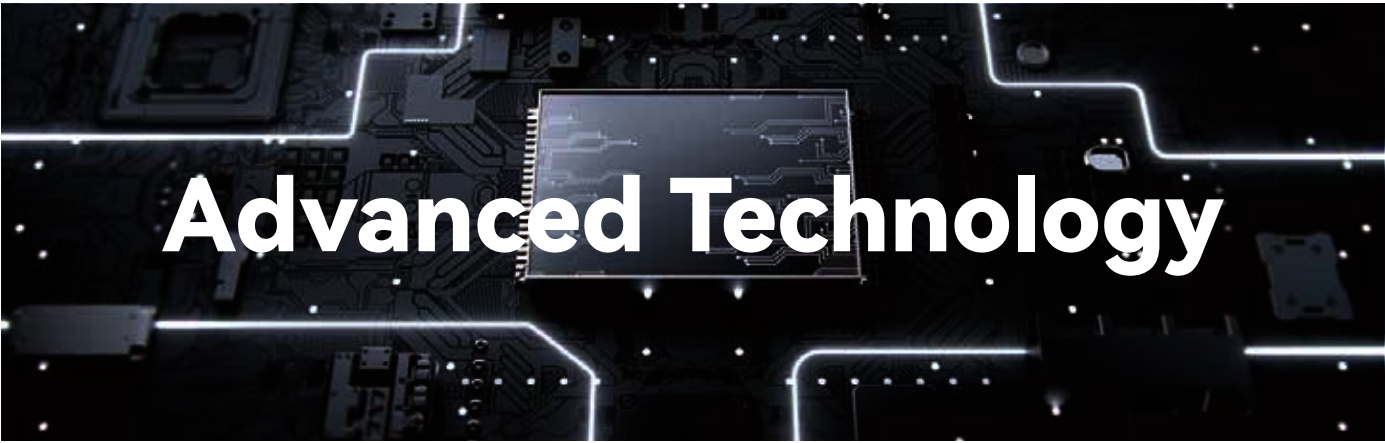
Key Features & Technical Specifications		
Environmental Chamber Control	Temperature range: -55°C to +150°C	Humidity range: 20% to 98% RH
	TCP/UART protocol communication for programmable control (target temperature/dwell time/cycle count)	PWM-based intelligent refrigeration control (frost/drip-free operation)
Power Management	Custom power control protocol	5V ±10% power deviation testing
	Precision power monitoring (0.01W resolution @ 10ms sampling)	Frame Information Structure (FIS)-level precise power interruption
SSD Compatibility	Aerospace/industrial-grade SSD validation	SATA/HPSDI protocol support
	Parallel testing capacity: 80x SATA SSDs per batch (scalable)	
Performance Validation	Time-series IO performance metrics	FPGA-accelerated data verification
	Protocol error injection testing	
Automated Testing	GUI operation (multi-language support)	Centralized test data storage & visualization
	Self-developed database for automated reporting	
System Architecture	FPGA-based hardware acceleration	MES/ERP system integration
	Large-screen data dashboard	

Testing Equipment

ZS101



Key Features & Technical Specifications
Supports SSD automated production, integrating carding and testing
Supports 2.5-inch SATA and M.2 interfaces
Supports testing 600 SATA SSDs or 480 NVMe SSDs in a single test
Supports custom test temperature, enabling separate temperature control for left and right compartments
Supports SSD power on/off control
Supports remote desktop technology
Supports remote network power on/off technology
Supports graphical interface and multiple languages
Supports test data visualization and centralized storage
Supports monitoring and reminder of the system disk capacity of the test computer
Supports software integration
Supports software customization



Advanced Technology



Power Loss Protection

Power Loss Protection (PLP) safeguards data during sudden power outages. It uses onboard capacitors to provide enough energy to flush cached data to the NAND flash memory, preventing data corruption and ensuring write completion.

AES Encryption

YANSEN's 256-bit AES hardware encryption provides military-grade data security. This solution encrypts data in real-time with minimal performance impact, safeguarding sensitive information against unauthorized access. Ideal for defense, finance, and critical infrastructure.



Write-protection Technology

YANSEN industrial SSDs feature advanced write-protection technology to prevent accidental or malicious data modification. This hardware-based solution enables read-only mode activation through physical switches or secure commands, ensuring critical data integrity in forensic, medical, and industrial applications.

3D NAND

By stacking memory cells vertically, 3D NAND achieves greater storage capacity without compromising performance or durability—ideal for data-intensive industrial applications. YANSEN's SSDs utilize advanced multi-layer architectures to optimize speed and power efficiency, ensuring stable operation in harsh environments.



Physical Destruction

YANSEN industrial SSDs implement physical destruction technology that utilizes precisely controlled high-voltage pulses and targeted strong current surges to disable both NAND flash memory and controller components. YANSEN's technology provides protection for sensitive data in defense, financial, and healthcare applications where absolute data eradication is mandatory.



Wide Temperature

YANSEN industrial-grade SSDs feature Wide Temperature operation support (-40°C to 85°C). Utilizing advanced thermal management and industrial grade components, YANSEN's SSDs maintain data integrity and consistent speeds under harsh conditions—ideal for outdoor, automotive, and industrial applications.



Garbage Collection/TRIM

YANSEN industrial SSDs utilize intelligent Garbage Collection (GC) and TRIM mechanisms to maintain peak performance and endurance. YANSEN's proprietary GC algorithm actively consolidates fragmented data blocks during idle cycles, while TRIM command support efficiently identifies and clears invalid data. This dynamic coordination reduces write amplification, optimizes NAND utilization, and delivers consistent high-speed operation—critical for 24x7 industrial workloads.

Industrial Applications



 | Automation

Uninterrupted operation in harsh environments, data integrity during power failures, and long-term reliability under 24/7 workloads. YANSEN industrial SSDs address these demands with power-loss protection, wide-temperature, and high endurance, ensuring seamless performance in automation systems.



 | Surveillance

Surveillance systems face critical challenges including continuous 4K/8K video recording, extreme temperature fluctuations, and sudden power failures. YANSEN's SSDs provide the ultimate solution with high TBW endurance for non-stop video writes, wide-temperature operation for outdoor/indoor deployments, and advanced power loss protection to prevent footage corruption.



 | Medical

YANSEN SSDs deliver AES256 encryption, power-loss protection, and deterministic latency to ensure uninterrupted operation of MRI/CT systems. With advanced 3D NAND, YANSEN solutions maintain data integrity in life-critical environments while meeting strict medical equipment requirements.



 | Rail Transit

Rail transit systems require rugged storage solutions that withstand extreme vibrations, temperature fluctuations, and 24/7 operation. YANSEN industrial SSDs meet these challenges with shock resistance, wide-temperature operation, and high endurance for continuous data logging. Our SSDs ensure reliable performance to prevent data loss during critical transit operations.

Modern data centers face challenges of high-density storage, unpredictable workloads, and high reliability demands. YANSEN's SSDs deliver consistent low latency and high endurance to optimize virtualized environments and database operations. YANSEN's solutions ensure data integrity for cloud service providers and hyper-scale computing, reducing downtime risks while maintaining TCO efficiency.



 | Server & Cloud Computing

Automotive systems demand storage solutions that endure extreme temperatures, constant vibration, and sudden power interruptions. YANSEN automotive-grade SSDs deliver AEC-Q100 compliance, wide-temperature operation (-40°C to 105°C), and shock-resistant designs to ensure reliable performance for infotainment systems, ADAS data logging, and telematics. With power-loss protection and extended lifespan, our solutions maintain data integrity in harsh vehicular environments.



 | In-Vehicle

Retail systems require high-performance, reliable storage for POS transactions, inventory management, and digital signage. YANSEN industrial SSDs address these needs with fast read/write speeds, power-loss protection to prevent data corruption, and 24/7 operation durability. YANSEN solutions ensure seamless checkout experiences and real-time inventory tracking, even in high-traffic retail environments.



 | Retail

Robotic applications demand ultra-reliable storage solutions capable of handling real-time data processing, extreme environmental conditions, and continuous operation. YANSEN industrial SSDs are engineered to meet these challenges with cutting-edge technologies that ensure data integrity and system reliability.



 | Robotic