

TITANS Series Industrial 1.8" SATA Flash disk



Product features

- ❖ SLC - NAND type flash technology
- ❖ 1.8" SATA drive form-factor
- ❖ Extremely rugged metal casing to endure harsh environments
- ❖ Standard SATA 7-pin(data) + 15-pin(power) connector
- ❖ Serial ATA 1.0a specification compliance
- ❖ Performance up to 25.9MB/sec
- ❖ Capacity from 32MB up to 8GB

Product specifications

Compatibility	❖ Serial ATA standard rev. 1.0a
Flash technology	❖ SLC-NAND type flash based
Form-factor	❖ Rugged Metal 1.8" SATA hard disk drive
Host Interface	❖ Standard SATA 7-pin (data) + 15-pin (power) connector

Performance

Data transfer rate	❖ Serial ATA Gen-I (1.5Gb/s)
Sequential read	❖ 25.9 MB/sec (Max. /with dual flash)
Sequential write	❖ 11.9 MB/sec (Max. /with dual flash)
Average access time	❖ 0.7ms (estimated)

Environmental specification

Operating temp.	❖ STD. 0°C ~ 70°C / IND. -40°C ~ 85°C
Non-operating temp.	❖ STD. -20°C ~ 80°C / IND. -50°C ~ 95°C
Humidity	❖ 10% ~ 95% non-condensing
Vibration	❖ 15G compliance to MIL-STD-810F
Shock	❖ 1,500G compliance to MIL-STD-810F
Altitude	❖ 70,000 feet

Power consumption

Power requirement	❖ +5V ± 10%
Reading mode	❖ 190.0 mA(Max.)
Writing mode	❖ 200.0 mA(Max.)
Sleeping mode	❖ 117.5 mA(Max.)

Reliability

Wear-leveling	❖ Dynamic wear-leveling algorithms
MTBF	❖ > 1,000,000 hours
ECC	❖ 4-bits per 512bytes block
Endurance	❖ > 2,000,000 cycles

Physical specification

Weight (max.)	❖ 59.4g / 2.10 oz.
Dimension(W x L x H)	❖ 69.85 x 60.00 x 9.50 (mm)

Conformal coating ❖ Option for special request

Warranty

Standard grade	❖ 3 years
Industrial grade	❖ 5 years

INDUSTRIAL
CompactFlash Card

INDUSTRIAL
PCMCIA ATA Card

INDUSTRIAL
micro IDE Flash Disk

INDUSTRIAL
micro SATA Flash Disk


INDUSTRIAL
Solid State Disk

INDUSTRIAL
Mini PCI
USB Flash Disk

INDUSTRIAL
Card Reader

Product Specifications

Operating temperature supports Standard grade 0°C ~ 70°C and Industrial grade -40°C ~ 85°C
 Part number list - 1.8" rugged metal SATA flash Disk

Product Picture	Capacity	0°C~ 70°C	-40°C~ 85°C
	32MB	SR8SF032M-SECSC	WR8SF032M-SEISI
	64MB	SR8SF064M-SECSC	WR8SF064M-SEISI
	128MB	SR8SF128M-SECSC	WR8SF128M-SEISI
	256MB	SR8SF256M-SECSC	WR8SF256M-SEISI
	512MB	SR8SF512M-SECSC	WR8SF512M-SEISI
	1GB	SR8SF001G-SECSC	WR8SF001G-SEISI
	2GB	SR8SF002G-SECSC	WR8SF002G-SEISI
	4GB	SR8SF004G-SECSC	WR8SF004G-SEISI
	8GB	SR8SF008G-SECSC	WR8SF008G-SEISI

Part number decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 — C

Example

S R 8 S F 5 1 2 M — S E C S C — C

X1 ⇨ Grade

S : Standard grade operating temp. 0°C ~ 70°C

W : Industrial grade operating temp. -40°C ~ 85°C

X2 ⇨ The material of case

R : Rugged metal casing

X3 X4 X5 ⇨ Product category

8SF : 1.8" SATA flash disk

X6 X7 X8 X9 ⇨ Capacity

032M : 32MB **002G** : 2GB

064M : 64MB **004G** : 4GB

128M : 128MB **008G** : 8GB

256M : 256MB

512M : 512MB

001G : 1GB

X11 ⇨ Controller

S : 3S 88x3 A5 (Titans series)

X12 ⇨ Controller version

A,B,C.....

X13 ⇨ Controller grade

C : Commercial grade

I : Industrial grade

X14 ⇨ Flash IC

S : Samsung SLC-NAND flash IC

X15 ⇨ Flash IC grade / Type

C : Commercial grade

I : Industrial grade

C ⇨ Reserved for specific requirement

C : Conformal-coating

INDUSTRIAL CompactFlash Card

INDUSTRIAL PCMCIA ATA Card

INDUSTRIAL micro IDE Flash Disk

INDUSTRIAL micro SATA Flash Disk

INDUSTRIAL Solid State Disk

INDUSTRIAL Rugged Metal USB Flash Disk

INDUSTRIAL Adapter Card Reader