goodram enterprise

ENTERPRISE SataDrive

High Endurance SATA SSD for Your Enterprise

Sequential read

up to 530 MB/s

Sequential write

up to 500 MB/s

Random read

up to 98 000 IOPS

Random write

up to 77 000 IOPS

Interface

SATA III

Capacity

up to 15,36 TB

Form factor

2,5”

DWPD

0.4; 1; 3

Product features

- AES-XTS 256-bit Encryption
- TCG Opal 2.0 Support
- End-to-End Data Path Protection
- Power Loss Protection (PLP)

Solutions - SD05S

Form factor 2,5”				
Capacity[1]	480 GB	960 GB	1.92 TB	3.84 TB
Interface	SATA III	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC
Performance[2,3,4,5]				
Sequential read to (MB/s)	500	530	530	530
Sequential write to (MB/s)	440	500	500	500
4K random read to (IOPS)	95 000	98 000	98 000	98 000
4K random write to (IOPS)	40 000	67 000	77 000	68 000
Read latency (Typ.,µs)	130	125	130	125
Write latency (Typ.,µs)	30	30	30	30
Power consumption[6]				
Active (W)	2.9	3.2	3.3	3.5
Idle (W)	1.3	1.4	1.4	1.6
Endurance/Reliability				
DWPD[7]	3	3	3	3
TBW[8]	2.5 PB	4.9 PB	9.8 PB	19.6 PB
UBER[9]	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read
MTBF (hours)[10]	2 000 000	2 000 000	2 000 000	2 000 000
Limited warranty (years)[11]	5	5	5	5
Temperature				
Operating temp. (°C)	0 – 70	0 – 70	0 – 70	0 – 70
Non-operating temp. (°C)	-40 – 85	-40 – 85	-40 – 85	-40 – 85
Physical dimension				
Length (mm)	100.00	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00	7.00
Weight (g)	29.00	29.00	29.00	29.00

* A detailed explanation of symbols and markings is provided on the final page.

goodram enterprise

The data within this specification is subject to change by Wilk Elektronik S.A. without notice.
Performance numbers may vary based on system.
Copyright © 2025 Wilk Elektronik S.A. All rights reserved. configuration and testing conditions.

Solutions - SD05M

Form factor 2,5”					
Capacity[1]	480 GB	960 GB	1.92 TB	3.84 TB	7.68 TB
Interface	SATA III	SATA III	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC	3D TLC
Performance[2,3,4,5]					
Sequential read to (MB/s)	530	530	530	530	530
Sequential write to (MB/s)	360	500	500	500	500
4K random read to (IOPS)	92 000	98 000	98 000	98 000	97 000
4K random write to (IOPS)	20 000	33 000	40 000	30 000	23 000
Read latency (Typ.,µs)	140	120	120	130	160
Write latency (Typ.,µs)	50	40	30	35	45
Power consumption[6]					
Active (W)	2.7	3.1	3.1	3.4	3.8
Idle (W)	1.3	1.3	1.4	1.5	1.6
Endurance/Reliability					
DWPD[7]	1	1	1	1	1
TBW[8]	815 TB	1.6 PB	3.3 PB	6.5 PB	13.1 PB
UBER[9]	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read
MTBF (hours)[10]	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000
Limited warranty (years)[11]	5	5	5	5	5
Temperature					
Operating temp. (°C)	0 – 70	0 – 70	0 – 70	0 – 70	0 – 70
Non-operating temp. (°C)	-40 – 85	-40 – 85	-40 – 85	-40 – 85	-40 – 85
Physical dimension					
Length (mm)	100.00	100.00	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00	7.00	7.00
Weight (g)	29.00	29.00	29.00	29.00	29.00

* A detailed explanation of symbols and markings is provided on the final page.

goodram enterprise

The data within this specification is subject to change by Wilk Elektronik S.A. without notice.
Performance numbers may vary based on system.
Copyright © 2025 Wilk Elektronik S.A. All rights reserved. configuration and testing conditions.

Solutions - SD05F

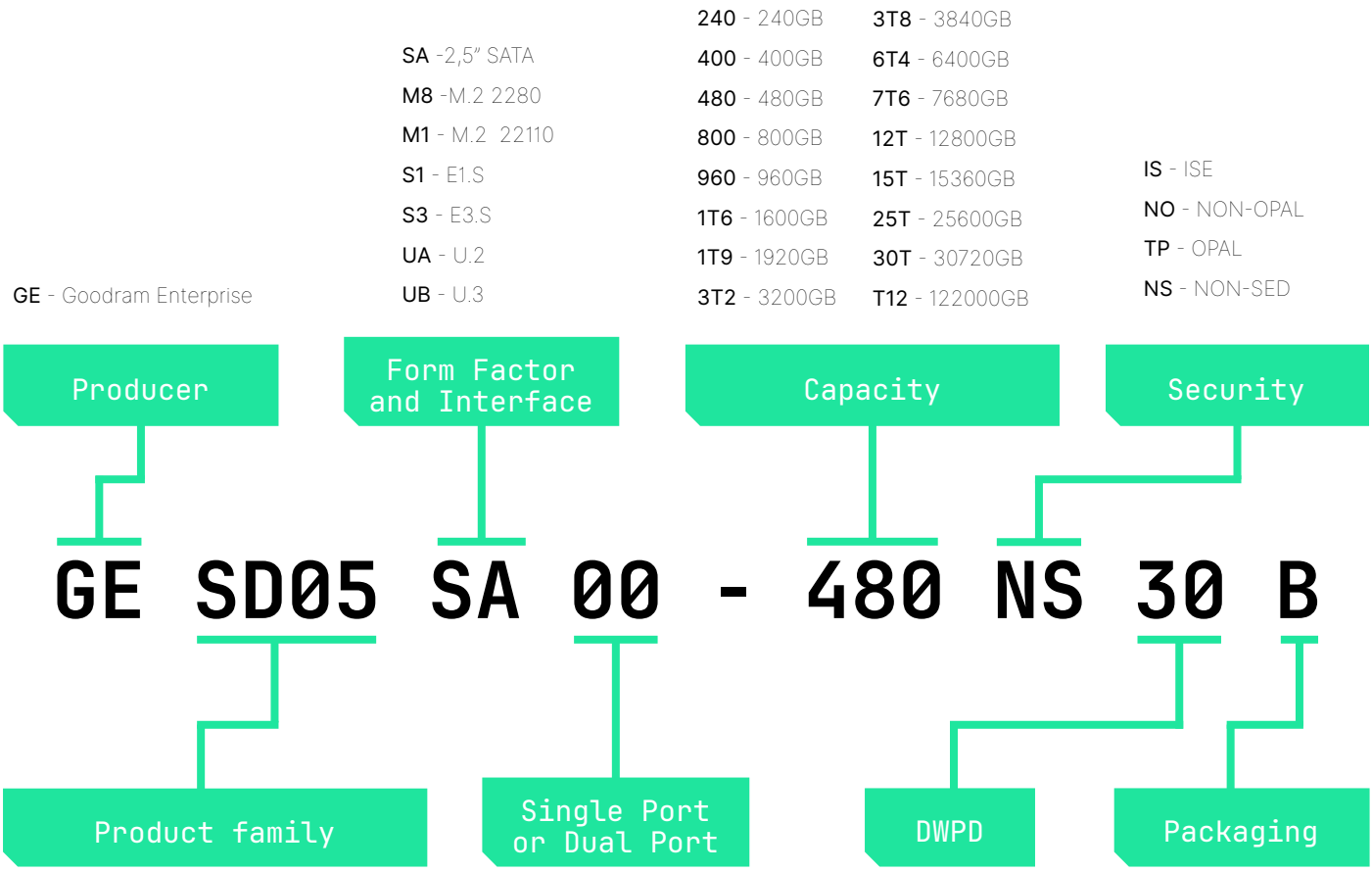
Form factor 2,5”				
Capacity[1]	1.92 TB	3.84 TB	7.68 TB	15.36 TB
Interface	SATA III	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC
Performance[2,3,4,5]				
Sequential read to (MB/s)	530	530	530	530
Sequential write to (MB/s)	500	500	500	500
4K random read to (IOPS)	94 000	97 000	97 000	94 000
4K random write to (IOPS)	13 000	20 000	14 000	10 000
Read latency (Typ.,µs)	135	130	140	165
Write latency (Typ.,µs)	55	40	55	65
Power consumption[6]				
Active (W)	3.8	4.4	5.1	5.4
Idle (W)	1.4	1.5	1.8	1.9
Endurance/Reliability				
DWPD[7]	0.5	0.5	0.4	0.4
TBW[8]	1.7 PB	3.5 PB	6.0 PB	10.7 PB
UBER[9]	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read
MTBF (hours)[10]	2 000 000	2 000 000	2 000 000	2 000 000
Limited warranty (years)[11]	5	5	5	5
Temperature				
Operating temp. (°C)	0 – 70	0 – 70	0 – 70	0 – 70
Non-operating temp. (°C)	-40 – 85	-40 – 85	-40 – 85	-40 – 85
Physical dimension				
Length (mm)	100.00	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00	7.00
Weight (g)	29.00	29.00	32.00	39.00

* A detailed explanation of symbols and markings is provided on the final page.

goodram enterprise

The data within this specification is subject to change by Wilk Elektronik S.A. without notice.
Performance numbers may vary based on system.
Copyright © 2025 Wilk Elektronik S.A. All rights reserved. configuration and testing conditions.

Decoder P/N



US10 - UltraSpeed Series PCIe Gen4×4
US20 - UltraSpeed Series PCIe Gen5×4
DC10 - DataCore Series PCIe Gen4×4
DC20 - DataCore Series PCIe Gen5×4
DC25 - DataCore Series PCIe Gen5×4
BS10 - BootSystem Series PCIe Gen4×4
BS05 - BootSystem Series SATA III
SD05 - SATADrive Series SATA III

SP - Single Port
DP - Dual Port
00 - None

03 - 0,3
04 - 0,4
05 - 0,5
10 - 1
30 - 3

B - GOODRAM BULK

goodram enterprise

The data within this specification is subject to change by Wilk Elektronik S.A. without notice.
Performance numbers may vary based on system.
Copyright © 2025 Wilk Elektronik S.A. All rights reserved. configuration and testing conditions.

Legend

(1) 1 TB = 10^{12} bytes.

(2) Sequential Performance is based on FIO on Linux, 128 K, with QD=32, 1 worker.

(3) Random Performance is based on FIO on Linux, 4 K data size, QD=32, 1 worker.

(4) Latency is measured with random workloads based on FIO on Linux, 4 KB data size, QD=1, 1 worker.

(5) Sequential performance is based on FIO (Flexible I/O Tester - an open source tool used to measure the performance of input/output (I/O) operations for disk drives and storage systems under various test scenarios) on Linux, 128 K, with QD=32, 1 worker.

(6) Power consumption (Typical) is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).

(7) The results of DWPD are obtained in compliance with JESD219A Standards.

(8) 1 PB = 1000 TB, 1 TB = 10^{12} bytes.

(9) UBER (Uncorrectable Bit Error Rate) – a measure of data storage reliability, indicating the number of uncorrectable bit errors per amount of data read. This value shows how often errors may occur that cannot be corrected using internal ECC (Error Correction Code) mechanisms.

(10) Please note that a lower MTBF should be expected for higher capacity drives, and we apply the lowest MTBF for all capacities.

(11) We warrant that each Product manufactured and delivered by Wilk Elektronik SA will comply with the specifications for five (5) years from the date of delivery or until the total number of stored terabytes specified in the S.M.A.R.T. attribute is exceeded, whichever occurs first.

goodram enterprise

The data within this specification is subject to change by Wilk Elektronik S.A. without notice.
Performance numbers may vary based on system.
Copyright © 2025 Wilk Elektronik S.A. All rights reserved. configuration and testing conditions.