

HERMES Series

Industrial Rugged Metal GDK-2010 High Capacity USB Flash Disk



Product features

- ❑ RoHS Compliant
- ❑ Bulky size USB flash disk
- ❑ High-speed USB 2.0 interface
- ❑ Samsung NAND type of SLC or MLC flash (Optional)
- ❑ Complies with Microsoft Vista Ready-Boost® requirements

Product specifications

Compatibility ❑ USB 2.0 and USB 1.1 backwards compatible

Flash technology ❑ Samsung NAND type of SLC or MLC flash (Optional)

Form-factor ❑ Bulky size USB in rugged metal alloy

Performance

Data transfer rate ❑ USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s)

Sequential read ❑ SLC : 30.0MB/sec (Dual Channel)
MLC : 30.0MB/sec (Dual Channel)

Sequential write ❑ SLC : 29.24MB/sec (Dual Channel)
MLC : 29.0MB/sec (Dual Channel)

Average access time ❑ 0.4ms (estimated)

Environmental specification

Operating temp. ❑ SLC : STD. 0°C ~ 70°C / IND. -40°C ~ +85°C
MLC : STD. 0°C ~ 70°C

Non-operating temp. ❑ SLC : STD. -20°C ~ +80°C / IND. -50°C ~ +95°C
MLC : STD. -20°C ~ +80°C

Humidity ❑ 10% ~ 95% non-condensing

Acoustic noise ❑ 0dB

Vibration ❑ 15G compliance to MIL-STD-810F

Shock ❑ 1,500G compliance to MIL-STD-810F

Altitude ❑ 70,000 feet

OS supported (Microsoft) ❑ Windows Vista / XP Pro / XP Embedded /
Point of Service / Win CE / Server 2003 /
Linux and DOS / Mac9.x, Mac OS X

Conformal coating ❑ Option for special request

❑ Fixed disk type; optional for removable disk type

❑ Samsung SLC-NAND flash disk available from
16GB, 32GB and 64GB

❑ MLC-NAND flash disk available from
32GB, 64GB and 128GB

❑ Operating commercial grade and industrial grade

Functionality ❑ Default in removable disk

❑ Optional for fixed disk mode and
works as bootable disk

❑ Microsoft Vista Ready-Boost® requirements

Power consumption

Power requirement ❑ 5V ± 10% via on board USB port

Reading mode ❑ SLC : 155 mA (Max.) / MLC : 160 mA (Max.)

Writing mode ❑ SLC : 175 mA (Max.) / MLC : 180 mA (Max.)

Idle mode ❑ SLC : 90 mA (Max.) / MLC : 90 mA (Max.)

Reliability

Wear-leveling ❑ Static wear-leveling algorithms

MTBF ❑ Samsung SLC-NAND flash > 3,000,000 hours
MLC-NAND flash > 1,000,000 hours

ECC ❑ Enhanced management 8 bits per 512bytes block

Endurance ❑ Samsung SLC-NAND flash > 2,000,000 cycles
MLC-NAND flash > 1,000,000 cycles
Logically contributed by wear-leveling and
advanced bad sector management algorithms

Physical specification

Weight (max.) ❑ 40 g ± 3 g / 1.40 oz.

Dimension(W x L x H) ❑ 32.00 x 89.30 x 11.30 (mm)

Warranty

❑ Standard grade : 3 years

❑ Industrial grade : 5 years

❑ MLC-NAND flash : 1 year

CF

Industrial
CompactFlash
Card

CFast

Industrial
CFast
Card

ATA

Industrial
PCMCIA ATA
Card

MIF

Industrial
micro IDE Flash
Module

MSF

Industrial
micro SATA Flash
Module

MUM

Industrial
micro USB
Module

SSD

Industrial
Solid State
Disk

USB

Industrial
Rugged Metal
USB Flash Disk

SD

Industrial
SD & SDHC
Memory Card

AD

Industrial
Adapter
Card-Drive

Part number list - Rugged metal GDK-2010 High Capacity USB 2.0 flash disk

Product Picture	Capacity	0 °C ~ 70 °C	-40 °C ~ +85 °C	MLC Flash (*)
	16GB	GDKUF016G-JCCSC-F	GDKUF016G-JCISI-F	N/A
	32GB	GDKUF032G-JCCSC-F	GDKUF032G-JCISI-F	GDKUF032G-JCCMC-F
	64GB	GDKUF064G-JCCSC-F	GDKUF064G-JCISI-F	GDKUF064G-JCCMC-F
	128GB	N/A	N/A	GDKUF128G-JCCMC-F

F: defaulted as Fixed disk type

R: optional as Removable USB flash disk

* MLC solution supports operating temperature standard grade 0°C ~ 70°C

Part number decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	—	X11	X12	X13	X14	X15	—	Z1	/	C			
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Example

G D K U F O 6 4 G — J C I S I — F / C

X1 X2 X3 ➤ The size of casing

GDK : Bulky size casing

X4 X5 **Product category**

UF : USB 2.0 Flash Disk

X6 X7 X8 X9 Capacity

016G : 16GB

032G : 32GB

064G : 64GB

128G : 128GB

X11  **Controller**

J : JMicron (HERMES 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

M : Unrestricted MLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade

I : Industrial grade

21 Disk types

F: defaulted as Fixed disk type

R: optional as Removable USB flash disk

C Reserved for specific requirement

C : Conformal coating (Optional)