DK Series
Serial Memory Keys

Datakey®

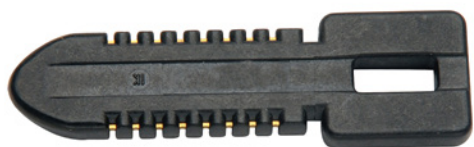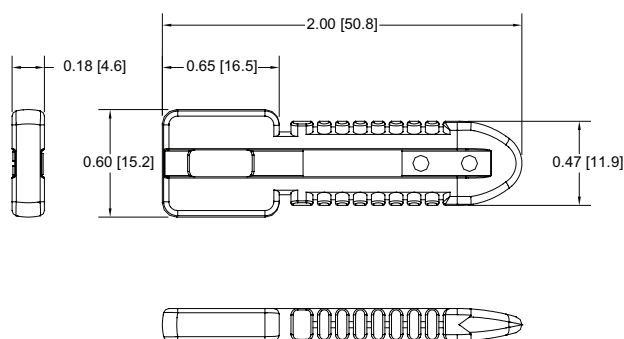The power of memory. Secured.

The DK series is an ultra-rugged, key-shaped, portable memory device that allows you to store and transport data. Each device contains a 1Kb, 4Kb, or 16Kb non-volatile, serial Microwire[1] EEPROM that can be read, erased, and written via a simple interface with your host hardware. The keys can also be accessed and programmed through the KeyLink™ programmers that easily interface to PCs and other host hardware via a standard RS-232 or USB port. A tough, wear-resistant body protects the embedded memory from harsh environmental influences. The key retains data even when exposed to dirt, moisture, chemicals, X-rays, and up to 15kV of electrostatic discharge.

For pin-out information, refer to the individual data sheets for the KC4210 family of key receptacles.

Drawing dimensions are in inches and millimeters [mm].
Dimensions are nominal and subject to manufacturer's tolerances.

MECHANICAL	
Contact Life	15,000 Insertions/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Top:Bottom)
Key Head Shear Limit	67 N (15 lbf)
Key Twist Torque Limit	1.7 N-m (15 in. lbf)

ELECTRICAL [1]	
Power, Active	25 mW at 5 V Typical
Power, Standby	250 µW at 5 V Typical
Voltage[2,3]	2.7 to 5.5 V
ESD Protection	15 kV (per Std. 064-1028)

ENVIRONMENTAL	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% to 95% (non-condensing)

MEMORY[1]	
Key:	Capacity:
DK1Kb	1Kb (1,024 bits) 64 x 16
DK4Kb	4Kb (4,096 bits) 256 x 16
DK16Kb	16Kb (16,384 bits) 1024 x 16
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Cycles Minimum
Data Life (Storage)	10 Years Minimum

MATING COMPONENT(S)	
Panel-Mount Receptacle	KC4210
PCB Mount Receptacle	KC4210PCB
Reader/Writer	KeyLink™ III (recommended), KeyLink™ II

ORDERING INFORMATION[4]	
DK1Kb (Black)	611-0006-002A
DK4Kb (Black)	611-0006-004A
DK16Kb (Black)	611-0022-000A

1: Complete Microwire interface specification available at www.datakey.com
2: The bulk erase command is not supported at < 4.6V.
3: It is recommended that all new key/token implementations be designed to operate with power supplies in the range of 2.7 to 3.6 volts. Although there are no immediate difficulties in procuring memory devices that operate in the 4.5 to 5.5 volt range, future availability may be impacted as semiconductor manufacturers shrink their die geometries.
4: "A" suffix on part number indicates RoHS compliance.
NOTES:
Conforms with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CE

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