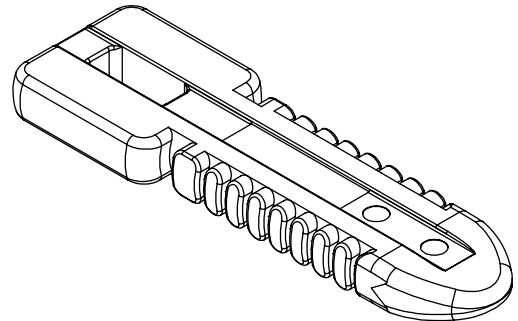
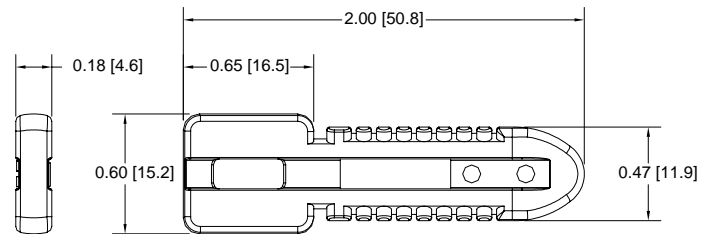


Datakey Electronics' DK Series is an ultra-rugged, key-shaped, portable data carrier that allows you to store and transport data. Each device contains a 1Kbit, 4Kbit, or 16Kbit non-volatile, serial Microwire<sup>1</sup> EEPROM that can be read, erased, and written to via a simple interface with your host hardware. The DK can also be accessed and programmed through the KeyLink™ Reader/Writers 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 chip from harsh environmental influences. The Key retains data even when exposed to dirt, moisture, chemicals, X-rays, and up to 15kV of electrostatic discharge.

Mechanical	
Contact Life	15,000 Insertions/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Top:Bottom)
Key Head Shear Limit	15 Pounds
Key Twist Torque Limit	15 Inch-pounds
Electrical <sup>1</sup>	
Power, Active	25 milliwatts typical
Power, Standby	250 microwatts typical
Voltage <sup>2, 3</sup>	2.7 to 5.5V
ESD Protection	15kV (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 <sup>1</sup>	
Key:	Capacity:
DK1000	1Kb (1,024 bits) 64 x 16
DK4000	4Kb (4,096 bits) 256 x 16
DK16000	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 Components	
Panel-Mount Keyceptacle <sup>®</sup>	KC4210
PCB Mount Keyceptacle	KC4210PCB
Reader/Writer	KeyLink™ III (recommended), KeyLink™ II
Ordering Information <sup>4</sup>	
DK1000 (Black)	611-0006-002A
DK4000 (Black)	611-0006-004A
DK16000 (Black)	611-0022-000A



Refer to Keyceptacle<sup>®</sup> data sheets for pin-out information. Other Key head designs and customization are also available. Contact factory.



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

#### NOTES:

- 1: Complete Microwire Interface Specification available at: [http://www.datakeyelectronics.com/technical\\_inter\\_specs.html](http://www.datakeyelectronics.com/technical_inter_specs.html)
- 2: The Bulk Erase command is not supported at < 4.6V.
- 3: **Design Recommendation:** 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 is no immediate or certain future difficulties in the procurement of memory devices that operate with V<sub>cc</sub> in the 4.5 to 5.5 volt range, it is possible the future availability of such memories may be impacted as semiconductor manufacturers continue to shrink their die geometries. Please contact the factory if you have any questions pertaining to this with your current or legacy design.
- 4: "A" suffix on part number indicates RoHS compliance.

