ISK Series
Serial Memory Keys

Datakey®

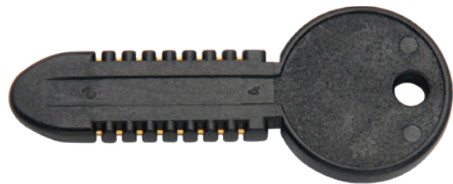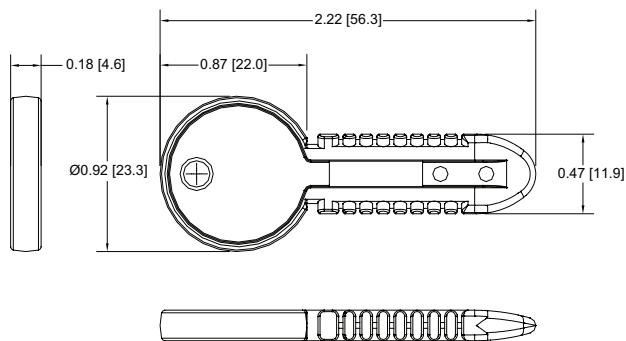The power of memory. Secured.

The ISK series of memory keys contain 1 Kb to 256 Kb of non-volatile, serial I²C EEPROM[1] memory. A molded, synthetic body protects the embedded memory from harsh environmental influences, so it retains data even when exposed to dirt, moisture, chemicals, X-rays and electrostatic discharge. The key design features a redundant contact system, ensuring maximum reliability so the key can be inserted into the receptacle with either side up. Customization options are available, including color-matching and custom logos.

Refer to receptacle data sheets for pin-out information. Other key head designs and customization are also available. Contact ATEK for details.

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

NOTE: Conforms with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011, and as amended by Directive 2015/863/EU, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CE

⚠ **WARNING**: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

ELECTRICAL[1]	
Power, Active	25 mW Typical at 5 V
Power, Standby	200 μW Typical at 5 V
Voltage[3]	2.7 to 5.5 V
ESD Protection	10 kV (Per Std. 064-1028)
Device Address	Zero (0), Consult ATEK for Options

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:
ISK1Kb	1Kb (1,024 bits) 128 x 8
ISK4Kb	4Kb (4,096 bits) 512 x 8
ISK16Kb	16 Kb (16,384 bits) 2048 x 8
ISK64Kb	64Kb (65,536) 8192 x 8
ISK256Kb	256Kb (262,144) 32,768 x 8
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Cycles Minimum
Data Life (Storage)	10 Years Minimum

MATING COMPONENT(S)	
Panel-Mount Receptacle	KC4210 Series
PCB Mount Receptacle	KC4210PCB
Programmer	KeyLink™ III (recommended), KeyLink II

ORDERING INFORMATION[2]	
ISK1Kb	611-0055-00xA
ISK4Kb	611-0056-00xA
ISK16Kb	611-0057-00xA
ISK64Kb	611-0163-00xA
ISK256Kb	611-0058-00xA

1: Complete I²C interface specification available at www.datakey.com.
2: "x" indicates optional color number. "A" suffix on part number indicates RoHS compliance. See CE declaration to the left for details.
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.

View our full product line at www.datakey.com

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