IST Series
Serial Memory Tokens

Datakey®

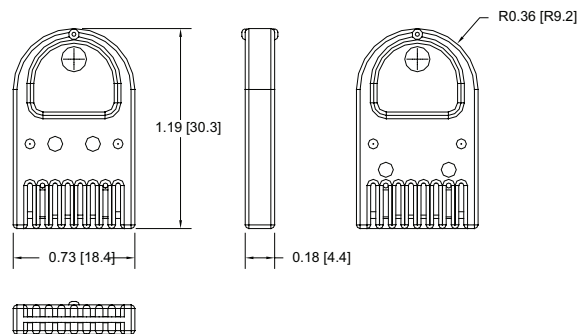The power of memory. Secured.

The IST series memory tokens contain 1 Kb to 256 Kb of non-volatile, serial I²C EEPROM memory[1]. A thin profile and space-saving interface connection makes them especially well suited for use in compact systems. The token is molded using a rugged composite, which 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 token features a redundant contact system ensuring maximum reliability and ease-of-use, as the token can be inserted into the receptacle with either side up.

For pin-out information, refer to the individual data sheets for the SR4000 family of receptacles.

R0.36 [R9.2]

1.19 [30.3]

0.73 [18.4]   0.18 [4.4]

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

MECHANICAL	
Contact Life	10,000 Insertion/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Front:Back)
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	15 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]	
Token:	Capacity:
IST1Kb	1 Kb (1,024 bits) 128 x 8
IST4Kb	4 Kb (4,096 bits) 512 x 8
IST16Kb	16 Kb (16,384 bits) 2048 x 8
IST64Kb	64 Kb (65,536 bits) 8192 x 8
IST256Kb	256 Kb (262,144 bits) 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	SR4210, SR4310, SR4410, SR4310xL, SR4410xL
PCB Mount Receptacle	SR4210PCB/SMT, SR4220PCB/SMT, SR4230PCB/SMT
Programmer	SlimLink™ III (recommended), SlimLink II
ORDERING INFORMATION[2]	
IST1Kb	611-0050-00xA
IST4Kb	611-0051-00xA
IST16Kb	611-0052-00xA
IST64Kb	611-0068-00xA
IST256Kb	611-0054-00xA

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.

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

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

View our full product line at www.datakey.com

ATEK Access Technologies

Access the power of technology.