

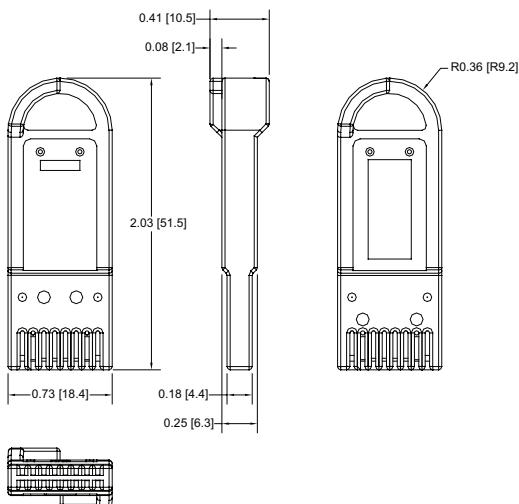
# DFX-I Series

## Industrial RUGGEDrive™ Token with SD Card Functionality

Datakey DFX-I memory tokens deliver SD card functionality in a more robust and secure form factor than consumer and industrial SD cards. As part of the Industrial RUGGEDrive™ line, DFX-I tokens utilize SD memory that is rated for operation over the entire industrial temperature range of -40°C to +85°C. DFX-I models utilize Multi-Level Cell (MLC) NAND flash, while DFX-IS models utilize more robust Single-Level Cell (SLC) NAND flash. Electrically, this token provides a standard SD interface (per the SD specification) – including support of SPI communications for embedded applications. DFX-I memory tokens utilize solid over-molded construction using ultra-rugged composites that protect the embedded memory from harsh environmental influences, such as dirt, moisture, chemicals and electrostatic discharge. The tokens can also be OEM-branded with a company logo, used in place of the Datakey logo.



For pin-out information, refer to the individual data sheets for the SR42xx (PCB-mount) and SR43xx or SR44xx (panel-mount) receptacles.



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



The power of memory. Secured.

MECHANICAL	
Contact Life	10,000 Insertion/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Front:Back)
ELECTRICAL	
Power, Active	185 Milliwatts Typical at 3.3 V
Power, Standby	400 Microwatts Typical at 3.3 V
Voltage	3.3 V Operation and Programming
ESD Protection	15 kV (air), 10 kV (contact) Per IEC 61000-4-2
ENVIRONMENTAL	
Storage Temperature	-40°C to + 85°C
Operating Temperature	-40°C to + 85°C
Relative Humidity	5% to 95% (non-condensing)
Waterproof	Yes
MEMORY <sup>2</sup>	
Capacity Options (DFX-I) <sup>2</sup>	4 GB, 8 GB, 16 GB, 64 GB
Memory Type (DFX-I)	MLC NAND Flash
Capacity Options (DFX-IS) <sup>2</sup>	1 GB
Memory Type (DFX-IS)	SLC NAND Flash
EXTERNAL INTERFACE	
Interface	SD, SPI (per Secure Digital Specification)
Transfer Rate (SD)	Speed Class 10, Minimum
Clock Rate	Refer to SD Specification
MATING COMPONENT(S)	
PCB-mount Receptacles	SR4210/SR4220/SR4230 – PCB/SMT
Panel-mount Receptacles	SR4210/SR4310/SR4410 Series (including IP-rated versions)
PC Adapter	DFX PC Adapter (USB Type A) P/N 607-0081-000A
ORDERING INFORMATION <sup>1</sup>	
DFX4G-I	611-0223-00xA
DFX8GB-I	611-0224-00xA
DFX16GB-I	611-0225-00xA
DFX64GB-I	611-0227-00xA
DFX1GB-IS	611-0228-01xA
DFX-I Development Kit, 4 GB	702-0093-000A
DFX-I Development Kit, 8 GB	702-0093-001A
DFX-I Development Kit, 16 GB	702-0093-002A
DFX-I Development Kit, 64 GB	702-0093-004A
DFX-IS Development Kit, 1 GB	702-0093-005A

1: "X" indicates optional color number.

"A" suffix on part number indicates RoHS compliance.

2: Contact ATEK for additional memory capacity options.

**NOTES:**

- EN 55022 Class A Statement: Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
- DFX token was tested for CE conformity while connected with a DFX PC Adapter.



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View our full product line at [www.datakey.com](http://www.datakey.com)

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