SR4310 Series

Panel-Mount Receptacles

Datakey®

The power of memory. Secured.

The SR4310 series of panel-mount receptacles mates with all Datakey SlimLine™, Extended SlimLine, NFX and RUGGEDrive™ memory tokens (see token datasheets for more details). The receptacles are designed to keep water and other materials from penetrating the enclosure. The SR4310 receptacles are available in three versions: an IP65-rated (splash-proof) version—the SR4310SP; an IP67-rated (immersion-rated) version – the SR4310IM; and, an IP67-rated version with EMI-reduction features – the SR4310EI. The SR4310EI has its outer shell molded using an electrically-conductive material to reduce electromagnetic emissions through both reflection and absorption.

As with all Datakey SlimLine token receptacles, this series features corrosion-resistant, "gold dot" contacts that perform reliably over a wear life of at least 50,000 insertion/removal cycles. The design employs a wiping mechanism to remove any debris or build-up on the token's contacts each time the token is inserted or removed. The receptacle includes a detent mechanism that contributes to token retention and gives users tactile and audible confirmation when an inserted token is physically engaged. The token/receptacle system also provides a Last-On/First-Off (LOFO) contact that is used by system designers to detect when a memory token has been inserted or removed (contact ATEK Access Technologies for token detection details for the NFX and RUGGEDrive memory tokens). SR4310 receptacles are inserted from the front of the panel and are secured from the inside using two (customer-supplied) M3 screws. The design allows for easy mounting and post-installation tamper evidence. A gasket is provided with each receptacle for sealing.

MECHANICAL	
Operating Life	50,000 Insertion/Removal Cycles Min.
Insertion Force	400 gf Min. / 2 kgf Max.
Removal Force	300 gf Min. / 2 kgf Max.
Vibration	MIL-STD 810F, Test Method 514.5 15 *g* (three axes) Operating
ELECTRICAL	
Contact Resistance	Beginning of Life: < 100 mΩ
	End of Life: < 500 mΩ
ENVIRONMENTAL	
Storage Temperature	-46°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% - 95% (non-condensing)
Salt-Fog	MIL-STD 810F Method 509.4 Proc. 1
MATING COMPONENT(S)	
Memory Tokens	All SlimLine, NFX and RUGGEDrive Tokens
Connector	Mates with 0.100" IDC Ribbon Cable Connectors
Threaded Fasteners	M3 x 0.5 (2.2 mm thread depth minimum) (3.3 mm typical) Max Torque Rating: 5.5 in-lbf
Gasket Material (receptacle provides over-tighten protection)	Temperature-Resistant Silicone (SR4310SP/SR4310IM versions) Electrically Conductive Silicone (SR4310EI version)
Gasket Thickness	0.032" nominal
ORDERING INFORMATION[1]	
SR4310SP (IP65)	606-0067-000A
SR4310IM (IP67)	606-0067-001A
SR4310EI (IP67/EMI)	606-0067-002A

1: "A" suffix on part number indicates RoHS compliance. See CE declaration below for details.
2: Customers must design to meet Datakey interface specifications to provide for future memory device compatibility. Interface specifications available at datakey.com.
3: RST signal used on IIT Series only.

NOTES:
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

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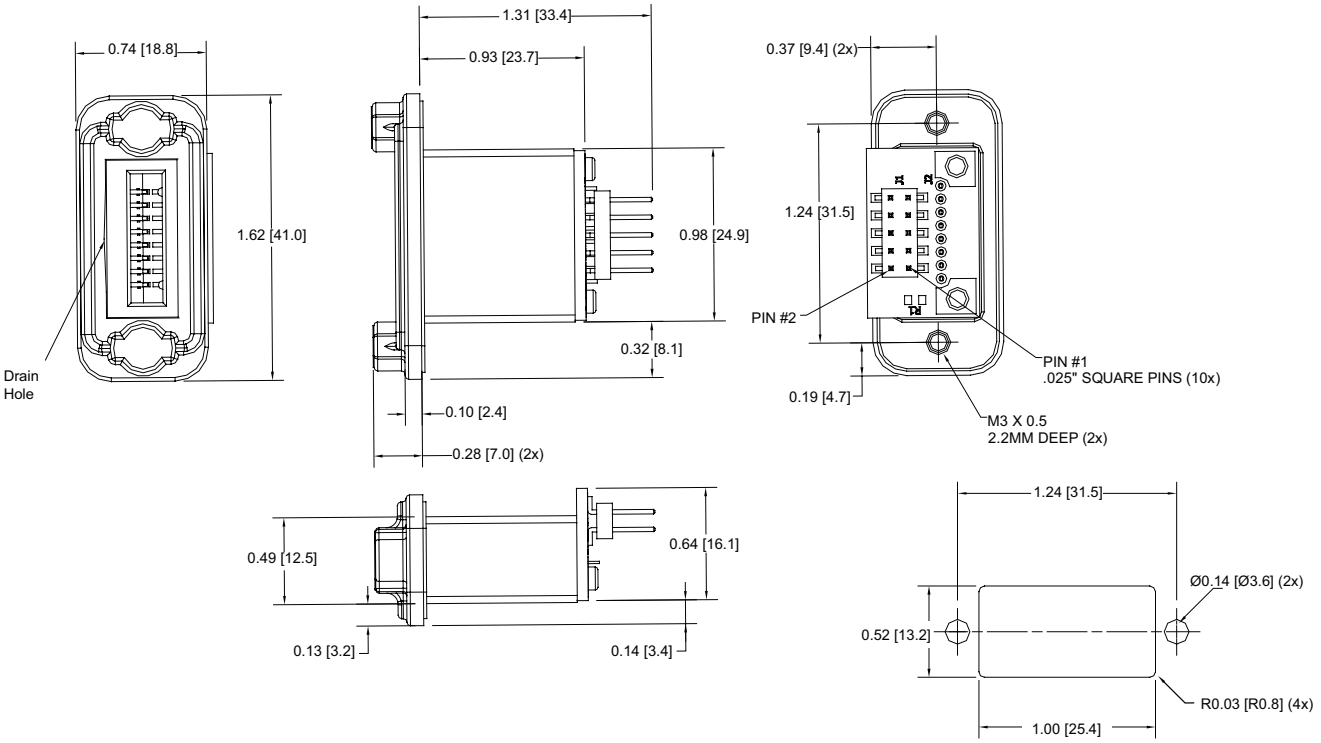

Installation Recommendation: For best water drainage, it is recommended that the receptacle be installed with output connector above the housing as shown above.
Note: Installation screws are supplied by the customer.

Panel Cut-out Recommendation: The above recommended panel cut out (1.00" x 0.52") is for a standard 10 gauge (0.135"/3.43mm) material thickness panel. Cut-out dimensions may need to be modified for different panel thicknesses to properly account for "tipping in" PCB during installation.

PIN-OUT CHART[2]					RUGGEDRIVE™ LINE		
PIN #	Microwire	I²C	SPI	NFX	DFX (SPI)	DFX (SD)	UFX (USB)
Pin 1	NC	NC	NC	NC	NC (chassis option)	NC	NC
Pin 2	Power (V_{CC})	Power (V_{CC})	Power (V_{CC})	Power (V_{CC})	Data Out (DO)	DAT0	+5V
Pin 3	Ground (GND)	Ground (GND)	Ground (GND)	Ground (GND)	/Chip Select (/CS)	DAT3	GND
Pin 4	Do Not Use	SIZE / RST[3]	Do Not Use	Do Not Use	Ground (GND)	NC	NC
Pin 5	Chip Select (CS)	Do Not Use	/Chip Select (/CS)	/Chip Select (/CS)	Ground (GND)	VSS	NC
Pin 6	Data In (DI)	Do Not Use	Data In (SI)	MOSI	Power (V_{CC})	VDD	DP
Pin 7	Serial Clock (SK)	Serial Clock (SCL)	Serial Clock (SCK)	Serial Clock (SCK)	Serial Clock (SCLK)	CLK	DM
Pin 8	Data Out (DO)	Serial Add/Data (SDA)	Data Out (SO)	MISO	Data In (DI)	CMD	NC
Pin 9	Do Not Use	Do Not Use	/Hold	DP (USB)	Reserved	DAT1	NC
Pin 10	LOFO	LOFO	LOFO	DM (USB)	Reserved	DAT2	NC

NC = No Connection

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

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View our full product line at www.datakey.com

ATEK Access Technologies
10025 Valley View Road, Ste. 190
Eden Prairie, MN 55344 U.S.A.

PH: 1.800.523.6996
FAX: 1.800.589.3705
+1.218.829.9797

www.atekaccess.com

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