

SR4310xL Series

Panel-Mount Receptacles

SR4310xL series panel-mount receptacles mate with all Datakey SlimLine™, Extended SlimLine, and RUGGEDrive™ memory tokens. These receptacles are designed to keep water and other materials from penetrating the enclosure they are mounted in. They are available in three versions: an IP65-rated (splash-proof) version—SR4310SL; an IP67-rated (immersion-rated) version—SR4310IL; and IP67-rated versions with EMI-reduction features—SR4310CL and SR4310EL. The SR4310CL is the latest design that utilizes an improved manufacturing process and is a direct replacement for SR4310EL receptacles. Both feature an outer shell molded using an electrically conductive material to reduce electromagnetic emissions. The SR4310EL is no longer recommended for new designs but is available for existing applications.

All Datakey SlimLine receptacles feature “gold dome” contacts that perform reliably over a wear life of at least 50,000 insertion/removal cycles and employ a wiping mechanism to remove debris or build-up on the token’s contacts each time a token is inserted or removed. Also, SR4310xL receptacles include a detent mechanism that contributes to token retention and gives users tactile and audible confirmation when an inserted token is fully engaged. The token/receptacle system 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 RUGGEDrive memory tokens)². SR4310xL receptacles are inserted from the front of the panel and are secured from the inside using two (customer-supplied) M3 screws allowing for easy mounting and post-installation tamper evidence. Additionally, a gasket is provided with each receptacle for sealing.



MECHANICAL	
Operating Life ⁴	50,000 Insertion/Removal Cycles Minimum
Insertion Force ⁴	400 gf Minimum / 2 kgf Maximum
Removal Force ⁴	300 gf Minimum / 2 kgf Maximum
Mass (with gasket)	~14 grams
ELECTRICAL	
Contact Resistance	Beginning of Life: < 100 mΩ End of Life: < 500 mΩ
ENVIRONMENTAL	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% - 95% (non-condensing)
Freezing Rain	MIL-STD-810H, Method 521.4, Glaze Ice
Blowing Dust	MIL-STD-810H, Method 510.7, Proc. I
Blowing Sand	MIL-STD-810H, Method 510.7, Proc. II
Altitude	MIL-STD-810H, Method 500.6, Proc. I & II ≤40,000 ft (12,192 m)
Mechanical Shock	MIL-STD-810H, Method 516.8, Proc. I
Vibration	MIL-STD-810H, Method 514.8, Proc. I
MATING COMPONENT(S)	
Tokens	All SlimLine and RUGGEDrive Memory Tokens
Connector	Molex CLIK-Mate™ p/n: 502386-0870 Mates with Molex CLIK-Mate™ Wire-to-Board Housing, p/n 502380-0800
Threaded Fasteners	M3 x 0.5 (2.2mm thread depth minimum) (3.3mm typical) Max Torque Rating: 5.5 in-lbf
Gasket Material (receptacle provides over-tighten protection)	Temperature-Resistant Silicone (SR4310SL/SR4310IL versions) Electrically Conductive Silicone (SR4310CL/SR4310EL versions)
Gasket Thickness	0.032" Nominal
ORDERING INFORMATION ¹	
SR4310SL (IP65)	606-0067-110A
SR4310IL (IP67)	606-0067-111A
SR4310CL (IP67/EMI)	606-0067-113A
SR4310EL (IP67/EMI)	606-0067-112A (Not recommended for new designs.)

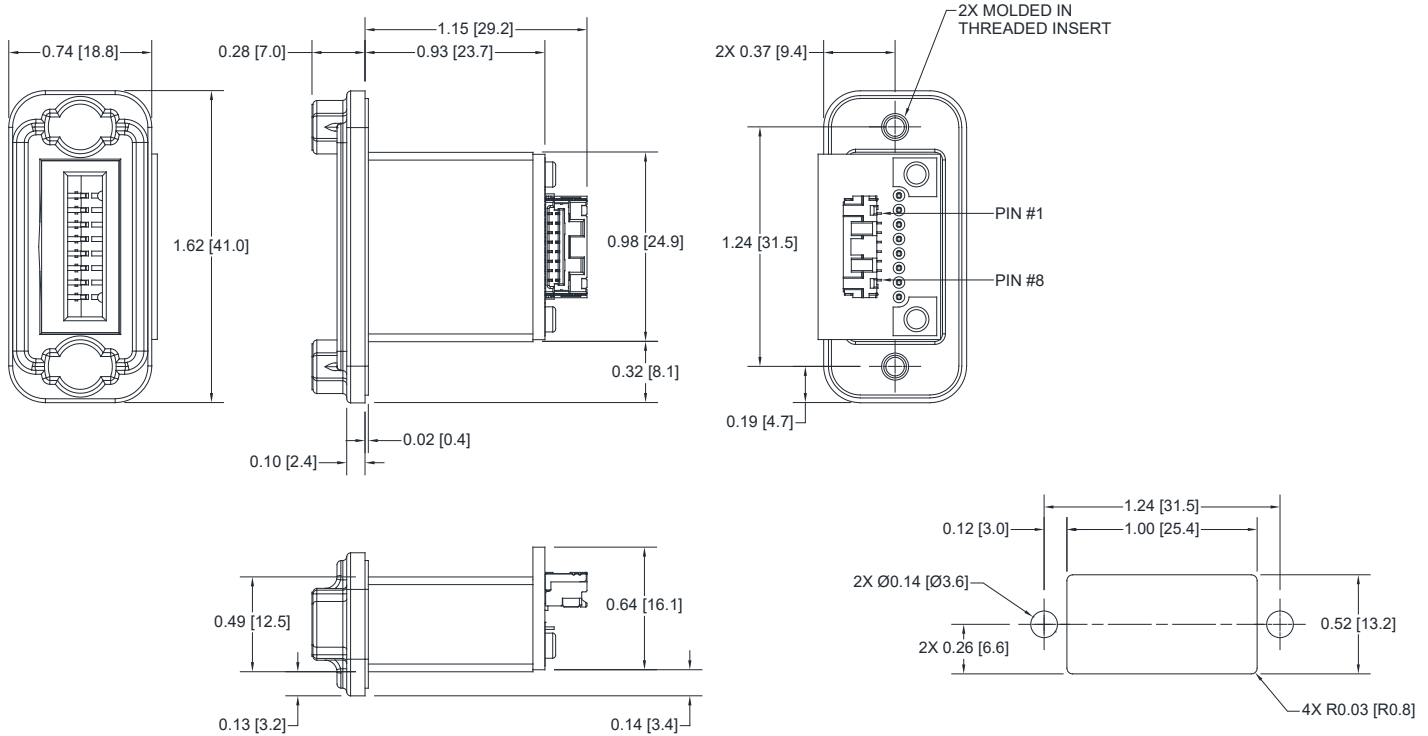
- 1: "A" suffix on part number indicates RoHS compliance. See CE declaration below for details.
- 2: Customers must design to meet Datakey interface specifications to provide for future memory device compatibility. Interface specifications available at datakey.com
- 3: RST signal used on IIT Series only.
- 4: Applications where a new token is used each time can reduce retention force prematurely.

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.



SR4310xL Series



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

Panel Cut-Out / Hole Pattern Recommendation:

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

PINOUT CHART ²				RUGGEDRIVE™ LINE		
Pin #	Microwire	I ² C	SPI	DFX (SPI)	DFX (SD)	UFX (USB)
1	LOFO	LOFO	LOFO	Reserved	DAT2	NC
2	Ground (GND)	Ground (GND)	Ground (GND)	/Chip Select (/CS)	DAT3	GND
3	Data Out (DO)	Serial Add/Data (SDA)	Data Out (SO)	Data In (SI)	CMD	NC
4	Data In (DI)	Do Not Use	Data In (SI)	Power (V _{CC})	VDD	DP
5	Serial Clock (SK)	Serial Clock (SCL)	Serial Clock (SCK)	Serial Clock (SCLK)	CLK	DM
6	Chip Select (CS)	SIZE / RST ³	/Chip Select (/CS)	Ground (GND)	VSS	NC
7	Power (V _{CC})	Power (V _{CC})	Power (V _{CC})	Data Out (DO)	DAT0	+5V
8	Do Not Use	Do Not Use	/Hold	Reserved	DAT1	NC

NC = No Connection

221-0185-000 Rev. H 6/26

View our full product line at www.datakey.com

ATEK Access Technologies
210 10th Avenue NE
Brainerd, MN 56401 USA

Telephone:
1-800-523-6996
+1-218-829-9797

www.atekaccess.com



Access the power of technology.