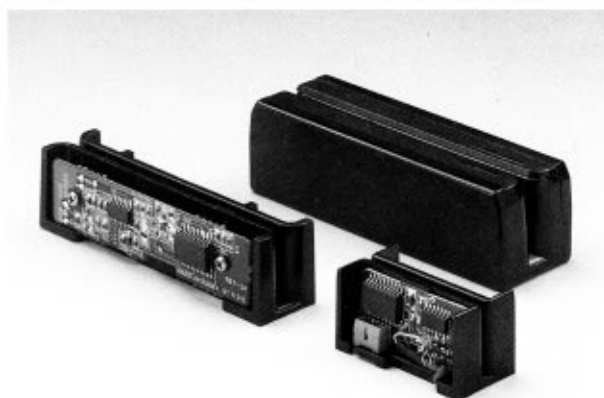


KDR-1000 SERIES

Manual Swipe Type Magnetic Stripe Readers

OVERVIEW

KDR-1000 series is a set of manual swipe type modules that read magnetically encoded data from magnetic stripes that conform to ISO standards and decode them to CLS, RCL and RDT in TTL signals.



FEATURES

- 3-Dimensional Head Mounting Design achieves optimal Adhesion with Minimal Wear.
- Universal Head Mounting makes Switching between Tracks Quick and Easy.
- Custom ICS provide 20% Jitter compensation over a wide Range of Card Feeding Speeds.
- Low Power Consumption results in optimum Circuit and System Designs
- Industrial Long Lifetime Heads up to maximum 2 million passes can be provided at option.
- High Coercive Magnetic Stripes up to 3,500 Oe can be read at option.
- Customized Mechanical Designs for Housing and Special Signal Interface are available.

SPECIFICATIONS

Card Standard
Recording Method
Card Thickness
Recording Density
Recording Capacity

ISO 7811/2
F2F (FM)
Plastic: $0.76\% \pm 0.08\text{mm}$
75BPI (ABA)/210 BPI (IATA/MINTS)
IATA: 79 Characters (7-bit Code)
ABA: 40 Characters (5-bit Code)
MINTS: 107 Characters (5-bit Code)
5VDC $\pm 5\%$
Less than 10mA (Single), 15mA (Double), 30mA (triple)
Less than 50 mVp-p
1.5mm
Indoors only
10 ~ 150 cm/sec
300,000 ~ 500,000 passes
Less than 0.5%
500VDC for 1min., 10M Ω or more at 500VDC
(Between ground and frame)

Power Supply
Power Consumption
Ripple
Reading Track Width
Operation Locus
Card Feeding Speed
Head Lifetime
Error Rate
Insulation Voltage & Resistance

ENVIRONMENTAL REQUIREMENTS

Operating Temperature and Humidity
Conservation Temperature and Humidity
Vibration

0 ~ 50°C, 20 ~ 90% RH
-20 ~ 70°C, Less than 95% RH
Amplitude 2mm, 10 ~ 50Hz/min in
X, Y, Z direction
Up to 30G, 11 msec

Shock Resistance

INTERFACE

Pin No.	Single Track		Double Track		Triple Track	
	Signal	Color	Signal	Color	Signal	Color
1	Vcc	Red	Vcc	Red	GND	Black
2	GND	Black	GND	Black	Vcc	Red
3	CLS	Brown	RDT 1/2	Brown	RDT 1	Brown
4	RCL	Yellow	RCL 1/2	Orange	RCL 1	Orange
5	RDT	Orange	CLS 1/2	Yellow	CLS 1	Yellow
6	<ul style="list-style-type: none"> • CLS: Card Loading Signal • RCL: Read Clock Signal • RDT: Read Data Signal • CONNECTOR/CABLE LENGTH 	SINGLE TRACK: MOLEX 5264-05 (180mm) DOUBLE TRACK: MOLEX 5264-08 (180mm) TRIPLE TRACK: MOLEX 5264-11 (180mm)	RDT 2/3	Green	RDT 2	Green
7			RCL 2/3	Blue	RCL 2	Blue
8			CLS 2/3	Purple	CLS 2	Purple
9			RDT 3	Gray		
10			RCL 3	White		
11	CLS 3	Pink				

OUTPUT VOLTAGE LEVELS

High Level ("0")	2.4V min (I _{OH} =0.4mA)
Low Level ("1")	0.8V max (I _{OL} =8.0mA)

ORDERING INFORMATION

Model	Dimensions (mm)					KDR-XXXX						Remark
						SINGLE TRACK			DOUBLE TRACK		TRIPLE TRACK	
	W	D	H	A	B	I	II	III	I+II	II+III	I+II+III	
KDR-1100	20	99	25	68	12	1110	1120	1130	1150	1160	1180	*
	30	99	29	68	12	1111	1121	1131	1151	1161	1181	**
KDR-1300	27	99	28.5	92	16	1310	1320	1330	1350	1360	1380	*
	30.9	99	32.3	92	16	1311	1321	1331	1351	1361	1381	**
KDR-1400	23.5	90	24	66	15	1410	1420	1430	1450	1460	1480	*
KDR-1500	22	43	23	33.5	15.5	1510	1520	1530	N/A	N/A	N/A	*
KDR-1600	35	115	28	60	12	1610	1620	1630	N/A	N/A	N/A	*

* KDR-1XX0 without cover ** KDR-1XX1 with cover

OUTLINED DRAWING

