### **Manual Swipe Magnetic Card Reader**

### 3S4YR-HNFR

- Manual Swipe reader with RS232 interface.
- Low power through use of CMOS circuitry.
- Equipped with RS232 Interface.
- Single, double or triple track configurations.
- 1.5 Metre connection cable to host.
- Powered by the host device.
- Bi-directional read capability.



## Ordering Information

Track Reading	Including RS232 Interface	Part Number
Track 2	YES	3S4YR-HNFR4
Tracks 1 and 2	YES	3S4YR-HNFR6
Tracks 2 and 3	YES	3S4YR-HNFR7
Tracks 1, 2 and 3	YES	3S4YR-HNFR1

### **Specifications**

Part number	3S4YR-HNFR				
Recommended card type	Magnetic Card: ISO 7810, 7811/1-5, 7812, 7813				
Number of tracks	1, 2 or 3; available in many combinations. See "Ordering Information"				
Recording Method	F2F				
Recording density	Track 1: 210 BPI				
	Track 2: 75 BPI				
	Track 3: 210 BPI				
Memory Capacity	Track 1: 7 bit x 79 characters max				
	Track 2: 5 bit x 40 characters max				
	Track 3: 5 bit x 107 characters max				
Card Feeding Speed	20 to 100 cm/second.				
Service life of magnetic head	300,000 passes minimum				
Operating Power Supply	TXD is used as a negative power supply for the card reader. DTR and RTS is used as a positive power supply for the card reader				
Mounting Location	Anywhere not directly subject to water or sunlight				
Ambient Temperature (Operation)	0°C to 45°C				

Ambient Temperature (Storage)	-15°C to 60°C		
Ambient Humidity (Operation)	30% to 85% RH without condensation		
Ambient Humidity (Storage)	20% to 90% RH		
Vibration	10 to 150Hz, 0.15mm single amplitude		
Shock	196mm/sec²(20G) in each of X, Y and Z directions		
Dimensions	100 L x 38.6 W x 35.2 H mm		
Weight	Approx. 170 g		

# Application Examples

- EFTPoS.
- ID card checkers.
- Club membership.
- Access Management into PC / LAN.

#### Data

#### **Communications**

Data is sent to the host in sequential order, track one, two and then three. Following the track identification number, the single byte 'D' (data) or 'E' (error) is followed by the track data and then at the end, a carriage return. For example on track two only.

"2"	"D"	"1234567890"	CR
Track Two	Data	Data	Carriage Return

### **Error Detection**

There are six error codes which identify a possible fault when reading a card.

- '1' Vertical parity error.
- '2' LRC error.
- '3' No data on track.
- '4' Start sentinel is not present.
- '5' Stop sentinel is not present.
- '6' LRC is not present.