Industrial
High-Speed Card Reader

rinas

HSR

Modular High-Speed Card Reader
for retrofitting in personalization equipment

OEM
QUALITY ASSURANCE
PRODUCTION
DESKTOP
ACCESSORIES

RINAS HSR

RINAS HSR – READING UP TO 20K CARDS AN HOUR IN EXISTING PERSO STATIONS

The Rinas HSR accurately reads magnetic card information on all three HICO and LOCO tracks at up to 1.2 m/s or approx. 20,000 cards per hour providing the cards are guided and the transport is uniform. Evaluation of the information can then be performed by a host system in real-time for the ultimate in quality control.

The magnetic head challenge
The magnetic head unit can read all three tracks of a standard ISO7811 card encoded to both HICO or LOCO coercivity levels and can even recognise transparent medium. Optionally available and customer adjustable counter-rollers are used for maintaining optimum head contact pressure and enable various card thicknesses to be catered for.

Versatile deployment possibilities
The HSR can be used during the card personalization stage by sending the read back information to a host system to ensure, for example, that the encoded information on the card is in agreement with the data that was sent. Another application is where the information stored on magnetic coded cards has to be in agreement with that appearing on printed paper, or wherever card data need to be read and checked for standards conformity.

Intelligent electronics with adaptable configurations
Flying leads (approx. 1m) attach the head unit to the control electronics, which are normally housed at a convenient location within the personalization equipment. Since the head units are flexible, customized configurations, such as JIS, can be easily catered for. The unit does require a signal indicating that the card is positioned under the head - usually from a sensor mounted directly on the head unit - and the customer must ensure that cards are guided accurately, the transport is uniform and that the Rinas requirements are fulfilled.

Complete with its serial interface, the control electronics are responsible for data collection and transmission to a host computer, where the read-back data can be verified and suitable action taken should there be a discrepancy.

Provision has been made for attaching a second head unit, typically located at a different position within the personalization equipment, allowing the customer to select (via a suitable serial command) which should be active at any given time. As such, only one head can be in operation while the other remains disabled.

Encoded Information

Magnetic Stripe	Bit Density	Encoded Information	Modulation Type
■ LOCO: Up to 3 tracks	■ Standard:	■ Standard (ISO7811):	■ Standard: F2F
■ HICO: Up to 3 tracks	Tracks 1 & 3: 210 bpi	Track 1: alpha-num.	■ Optional: Other types are
■ 300 Oe to 4,000 Oe	Track 2: 75 bpi	Tracks 2&3: numerical	available
	■ Customized:	■ Free bit encoding	
	Up to 3x 300 bpi	■ Customized	

Card Parameters

Card Dimensions	Card Thickness	Card Types	Standards
■ Length: 85.7 mm	■ 0.2 mm to 1.5 mm	■ All colours	■ ISO 7811
Other lengths possible	The spring-loaded head	■ Transparent cards	■ JIS
■ Width: 54.0 mm to	elements should retract by	■ Embossed cards	■ Visa Mini Card
204 mm (gift cards)	0.4 mm on head contact.		■ AAMVA
			(US driver's licence)

Equipment Parameters

Throughput	Control	Unit Dimensions (mm)	Temperature Range
■ Max. 20,000 cph	■ 1x RS232	■ L/W/H: 300/200/120	■ Operating: +10ºC to +35ºC
■ Approx. 1.2 m/s	■ 2x Magnetic heads		■ Storage: 0ºC to +40ºC
		Head Dimensions (mm)	
Magstripe Location	**Power**	■ L/W/H: 90/60/30	**Weight**
■ User defined	■ 24V DC (0.5A)		■ Approx. 4.5 kg