# FCR-200 Series

## **Proximity Card Reader**



## FCR-200

The FCR-200 Card Reader is an RF-based proximity reader interfaced to a microprocessor-based device capable of interpreting multiple card formats and transmitting card data directly to an automation system.

FCR-200 13.56MHz contactless smart cards and readers make access control more powerful, more versatile and offer enhanced security through data encryption and mutual authentication between the card and reader.

At the same time, FCR200 is user-friendly, delivering the convenience, affordability and reliability of proximity technology.

Using the 13.56 MHz technology platform, the FCR200 contactless smart card reader combines the longer read range of proximity with the power and heightened security of smart card technology.

#### **Reader Features**

- Interfaces directly with automation system
- Mounts to front of PLC-600 (FNS's Pertro Loading Controller) or Split Architecture MMI for Division II approved areas
- Uses serial communications port (RS-422/485)
- RF data transmission between the card and reader is encrypted using secure algorithm
- Based on international ISO interoperability stan dards providing compatibility with many popul ar card technologies(ISO15693, ISO14443A,B)
- Available for NEMA4 or hazardous location
- Auto-tuning feature automatically adjusts the reader for optimal read range performance on any mounting surface
- DIP switch selectable (Comm ID, Baud Rate, Etc. card reader configuration)



### **Technical Data and Specifications**

Specifications	
Read Range	iClass card : up to 8.9 cm
	iClass key/tag: 3.8 cm
	MIFARE: up to 5.1 cm
Power Supply	AC/DC24V / AC90~230V
Current	200 mA @DC24V (AVG)
Requirements	300 mA @DC24V (MAX)
Operating Temperature	-35 ℃ to 65 ℃
Operating	5% to 95% relative humidity
Humidity	Non-condensing
Transmit	13.56 MHz
Frequency	
Cable Distance	RS-422/485 1000m
Card	ISO15693 read only
Compatibility	iCLASS credentials serial number
	ISO14443B read only
	iCLASS credentials
	ISO14443A read only
	MIFARE and DESFire
Communication interface	RS-422(4wire), RS-485(2wire) 4800, 9600, 19200bps N-8-1
protocol	FnS ASCII protocol
	Modbus-RTU
Enclosure	Explosion-proof and water tight
Environmental Protection	Exd IIB T6, IP65

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#### Communications

#### General

- Configuration: RS-485 2-wire, RS-422 4-wire multi-drop.
- •4800, 9600, 19200 bps (N-8-1) selectable •Line Protocol : Half-duplex, Full-duplex
- •Protocol: FnS ASCII protocol
- •Communication ID : DIP switch selectable

#### **Card Features**

- · Meets ISO standards for thickness
- · Universal compatibility with HID readers
- External number for easy identification and control
- Approved for hazardous locations operation
- iCLASS technology ensures high security with mutual authentication between card and reader, encrypted data transfer, 64-bit diversified keys for read capability
- iCLASS 13.56 MHz read contactless smart card technology in a single card - provides high-speed, reliable communications with high data integrity

## **Card Specifications**

- Typical Read Range: 6.3-11.4cm (Dependent on installation condition)
- Dimensions : 5.4cmX8.6cm typical
- Card Construction :
   Thin, flexible polyvinyl chloride (PVC)
- Operating Humidity: 5%~95% non-condensing
- ID Numbers : 5-digits
- Transaction Time : <100ms typical</li>Operating Frequency : 13.56 MHz



### **Enclosure Specifications**

- Dimension:165mm(H)X177mm(W)X114mm(D)
- Material : AluminumExplosion : Exd IIB T6





