AYC-x6355

CSN SELECT™ Convertible Smart Card Readers

Datasheet

Introduction

The CSN SELECT™ AYC-x6355 is a series of multi-credential technology contactless smart card (13.56 MHz) readers with backlit keypad for use in access control system solutions and includes Rosslare's convertible technology. The readers have the flexibility to read the CSN from many smart card RFID standards, including MIFARE Classic Sector read, perfect for transitioning from one technology to another. They support access by an NFC compatible Android smartphone app.[1]

The readers have a sleek, modern design and can be used comfortably in any indoor or outdoor installation environment.

General Description

The AYC-x6355 reader series are built to read the CSN of the most popular smart cards in the security industry, including MIFARE sector read, as well as NFC compatible Android smartphones, and output the CSN in Wiegand or OSDP protocols. Dual authentication is available when both RFID smart cards and keypad PIN entries are combined.

Four individual control lines provide green LED control, red LED control, and buzzer control inputs, as well as an output for the optical wall tamper detector. AYC-x6355 readers support SIA Open Supervised Device Protocol (OSDP V2) including SCP mode (Secured Channel Protocol) to let the reader connect to any controller that supports OSDP.

With convertible technology, the AYC-x6355 can automatically become a 500-user secure standalone controller when attached to a MD-25TB secure relay I/O module or PS-C25TB Power Management Enclosure with built in secure relay I/O module.

Main Features

- The reader settings can be configured with the CS-CCT Configuration Tool or locally with keyboard programming
- Eight keypad transmission formats are available and can be locally selected via keypad programming
- Supports OSDP V2 including secure channel using AES 128 bit encryption for improved security with an extended range, up to 32 addresses
- MIFARE Classic EV1 Sector Read - Compatible with ISO 14443A 1K and 4K credentials
- Features Rosslare's convertible technology
- Supports NFC[1] technology using Rosslare BLE-ID mobile app or SDK.
- Sleek and modern design
- Two tri-colored LED operation
- Optical wall tamper detection
- Blue backlit keypad with power saving options (On, Off, Dimming)
- Mounting options include US gangbox and UK/Asia gangbox
- Comes with mounting template and installation kit for easy installation
- Water and dust resistant
  - IP68 for models without DIP switches
  - IP65 for models with DIP switches
- IK08 vandal resistance (without the bezel)

[1] NFC-ID can be generated from the Rosslare BLE-ID app or Rosslare Mobile Credentials SDK for each NFC supported Android smartphone.

Technical Specifications

Electrical Characteristics	
Operating Voltage Range	8 to 16 VDC
Current at 12 V	AYC-H/M6355: Standby: 120 mA, max: 160 mA
	AYC-Q6355: Standby: 145 mA, max: 200 mA
Read Range	AYC-H/M6355: 9 cm (3.5 in.)[1]
	AYC-Q6355: 5 cm (2.5 in.)[1]
	NFC up to 7 cm (2.9 in.)[2]
Green LED Control	Dry Contact, N.O.
Red LED Control	Dry Contact, N.O.
LED/Buzzer Controls	Dry Contact, N.O.
Tamper Output	Open collector, active low, max. sink current 16 mA
Keypad	3x4 matrix backlit keypad (used also for local programming)
Credential Technology[1]	13.56MHz: ISO14443A: MIFARE Classic® EV1 / MIFRAE Classic EV1 Sector read / MIFARE Classic®, MIFARE Ultralight® Nano / MIFARE Ultralight® EV1/ MIFARE Ultralight® C, MIFARE Plus® S / MIFARE Plus® SE / MIFARE Plus® X / MIFARE Plus® EV1, MIFARE DESFire® EV1/ MIFARE DESFire® EV2, MIFARE NFC N-TAG / Card Emulation ISO14443B - China National ID ISO15693 HID®, iClass®, PicoPass, iCode, LEGIC ISO18092: SONY® FeliCa® (Hong Kong Octopus)
Communication and Controller Connection	Wiegand: 26 (default), 32, 34, 40, 56, 64, 96, 128-bits Wiegand Card + PIN Clock & Data OSDP Secure Channel V2
Maximum Cable Distance to Controller	Wiegand: 150 m (500 ft) with 18-AWG cable OSDP (RS-485): 1,200 m (4,000 ft) with 2x2 18-AWG twisted shielded cable
Environmental Characteristics	
Operating Temp. Range	-35°C to 66°C (-31°F to 150°F)
Operating Humidity Range	0 to 95% (non-condensing)
Operating Environment	UV-resistant, epoxy-potted, suitable for indoor and outdoor use • IP68 for models without DIP switches • IP65 for models with DIP switches
Vandal Resistance	IK08 (without the bezel)

[1]Measured using a Rosslare MIFARE Classic EV1 (ISO card). Read range with other credential technologies may vary. Range also depends on electrical environment and proximity to metal.
[2]The NFC read range is different for different smartphones and also is affected by a variety of factors.

Physical Characteristics	
Dimensions (H x W x D)	AYC-H6355: 110.7 × 75.0 × 18.2 mm (4.4 x 3.0 x 0.7 in.)
	AYC-M6355: 89.5 × 88.9 × 18.3 mm (3.5 x 3.5 x 0.7 in.)
	AYC-Q6355: 120.0 × 76.0 × 21.5 mm (4.7 x 3.0 x 0.9 in.)
Weight	AYC-H6355: 185 g (6.5 oz)
	AYC-M6355: 169 g (5.9 oz)
	AYC-Q6355: 430 g (15.2 oz)

System Components: AYC-x6355 are compatible with a variety of Rosslare controllers, as well as with many third-party access control systems supporting Wiegand or OSDP interfaces.
Product Warranty: 5-year limited product warranty

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For more information regarding support, visit https://support.rosslaresecurity.com.