Contents [ hide ]

1 ASIS technologies R510 Series NFC Reader
2 Overview
3 Installation and Mounting Instruction
4 Dimenison
5 Connection
6 Operation Guide
7 Product Electrical Specification
8 FCC Statement
9 FAQ
10 Documents / Resources
10.1 References

ASIS technologies

# ASIS technologies R510 Series NFC Reader

## Specifications

- Power Supply (Recommend): Regulated linear power supply, +12VDC, 300mA
- Operating Voltage Range: Operating Current at +12VDC
- Maximum Cable Distance: Read Range
- Transmit Frequency: LED Light sensor Speaker
- Operating Temperature Range: Colour Material Weight Dimension Wire Termination Reader Mode PIN Input Keypad Communication Interface Wiegand interface Output bit

## Overview

### R510 Series NFC Reader Overview

The R510 Series NFC Readers are a new generation NFC reader. The R510 Series NFC reader can read a wide range of contactless smart card covering single size UID card to double size UID card. Card ID data can be output via RS485, wiegand. Three models are available to cater for various modes of security and operation needs.

| Model | Keypad | RGB LED | Speaker |
|---|---|---|---|
| R512 | n/a | yes | yes |
| R512k | yes | yes | yes |

**Table 1 Model Components**

### Reader Wiring and Color Code

Table 2 show Cable color of the reader and it function description

| Terminal Point Label | Description | Cable Color |
|---|---|---|
| Dev+ | RS485+ | Blue |
| Dev- | RS485- | Grey |
| +V | +12VDC | Red |
| GND | DC Ground | Black |

| | | |
|---|---|---|
| D0 | Wiegand Data 0 | White |
| D1 | Wiegand Data 1 | Green |
| ERL | Red LED | Brown |
| OKL | Green LED | Orange |
| BUZ | Buzzer | Yellow |

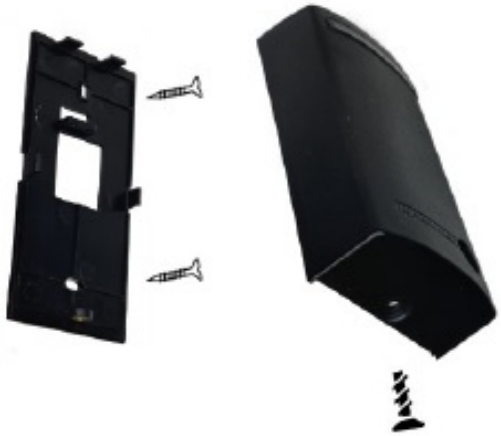
**Table 2 Wiring and Cable Color code**

## Installation and Mounting Instruction

- Identify the reader mounting location. The reader may install onto any surface, including metal.
- Remove the snap on cover and use the reader as a template, draw the mounting hole position onto the mounting surface. Drill 2 appropriate holes to install the reader.
- Drill a 25mm hole for the cable.
- Connect the external (site) cable to the terminal block on the reader according to the wiring code below. Double-check the wiring connection.
- Replace the snap on cover and tighten it with the screw provided.
- Switch on the power to test the reader and observe.

## Dimenison

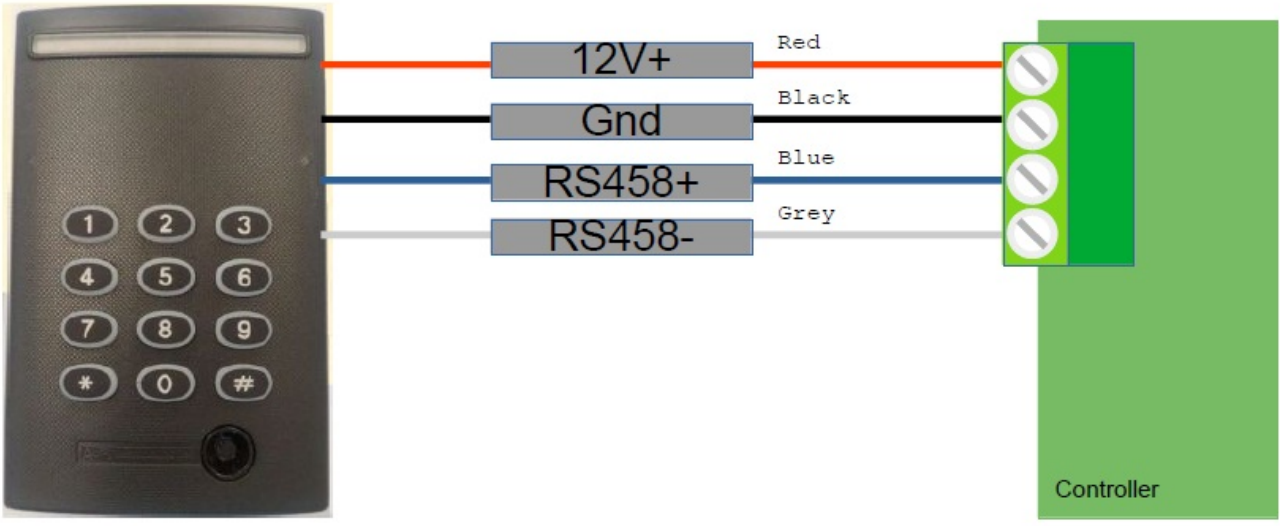

Physical Dimension



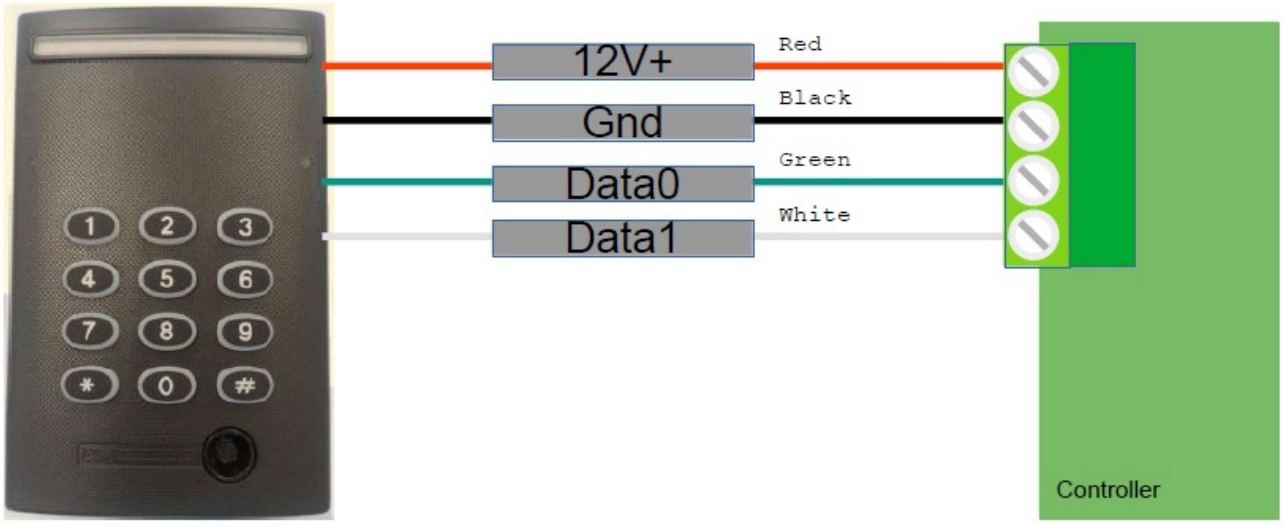
Mounting

## Connection

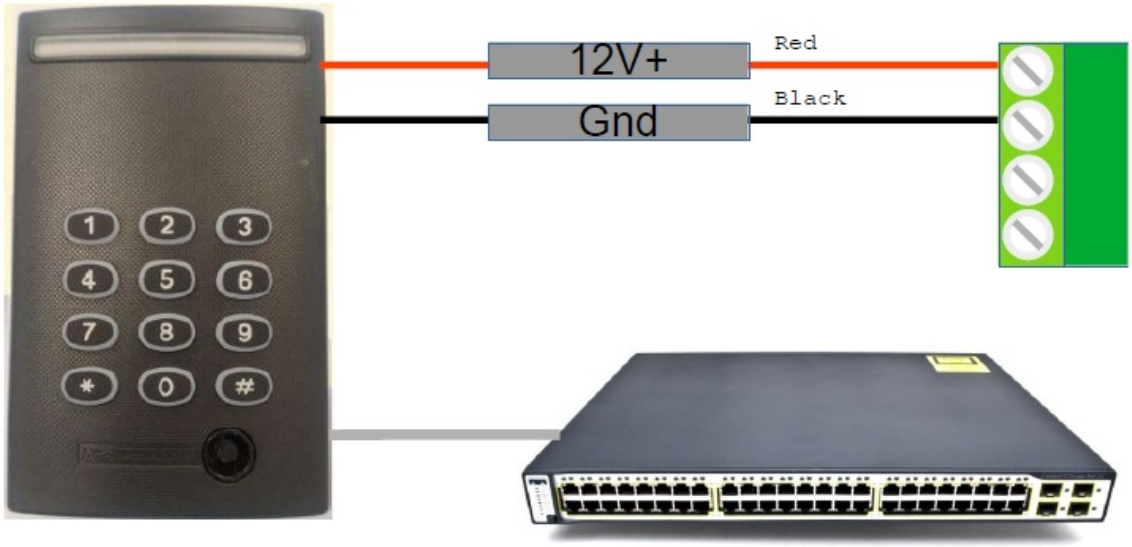
### Reader Connectivity to Controller

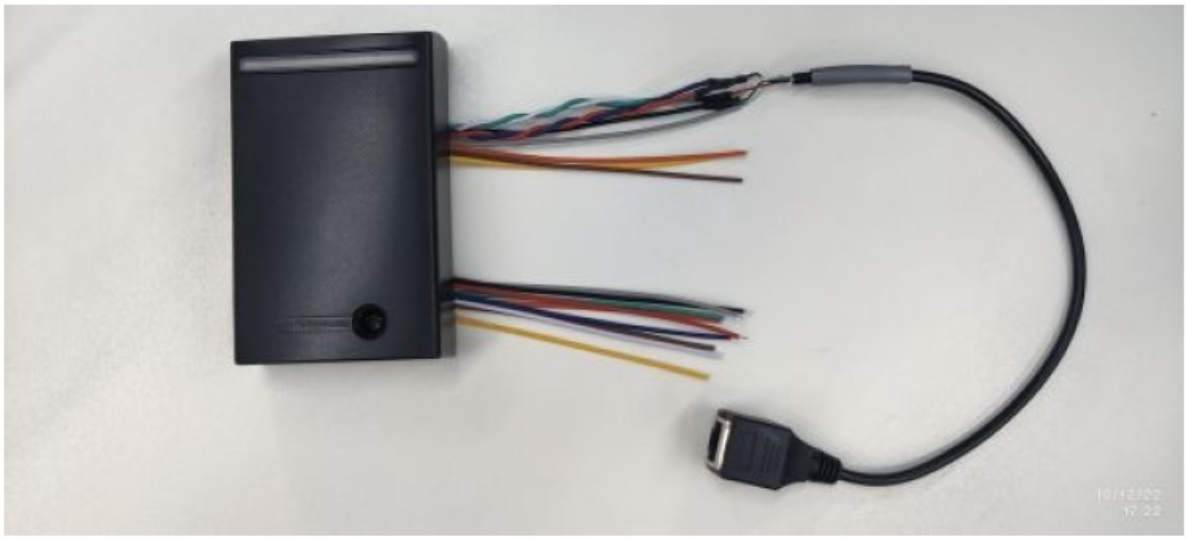


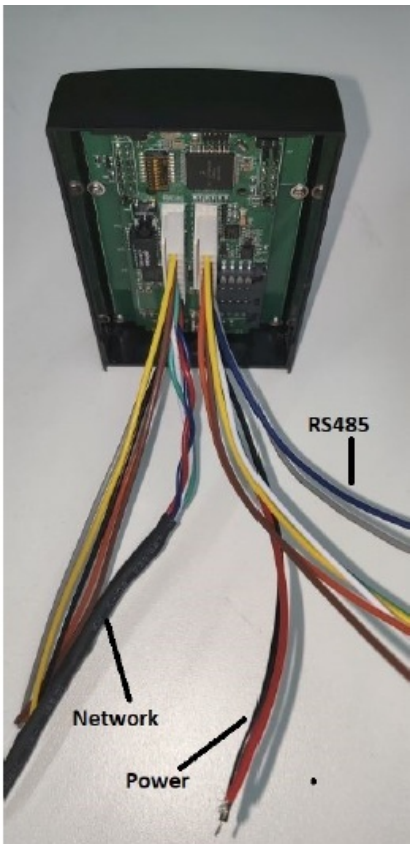

RS485


12V+
Gnd
Data0
Data1
Red
Black
Green
White
Controller

Wiegand


12V+
Gnd
Red
Black






## Operation Guide

Reader access via following operation.

### R510 NFC card access

| | |
|---|---|
| Bring the card in parallel to the R510 read er for a maximum read range. The Reade r will read Card for door access function. |  |

### Package List – R510 Reader

Item Description Qty. Complete with snap on cover 1 Mounting cover screw.

## Product Electrical Specification

| | |
|---|---|
| Power Supply (Recommend) | Regulated linear power supply, +12VDC, 300mA |
| Operating Voltage Range | +9VDC – + 24VDC |
| Operating Current at +12VDC | 85mA (average) – 185mA (peak) |
| Maximum Cable Distance | 150meters (500feet)<br>• (base on Belden 9538 24AWG 0.6mm, 8 core cable foil shield) (for wiegand interface)<br>• (base on Belden 9534 24AWG 06.mm, 4 core cable foil shield) (for RS485 interface) |
| Read Range | <=50mm (2”)<br>(Read Range is dependent on local installation conditions) |
| Transmit Frequency | 13.56MHz |
| LED | 9RGB LED |
| Light sensor | Infra red |
| Speaker | Polyphonic |
| Operating temperature Range | -20oC to 50oC ( -22oF to 150oF) |
| Colour | Black |
| Material | ABS |
| Weight | 350 grams |
| Dimension | 105mm (Height) X 65mm (Width) X 25mm (Thickness) |

| | |
|---|---|
| Wire Termination | 9 conducting wire at length approx. 300mm |
| Reader Mode | Card Only, Card and PIN, Phone |
| PIN Input | 1 – 6 Digits (R512K) |
| Keypad | 3 x 4 Keys (R512K) |
| Communication Interface | RS485 or Wiegand (Selectable) |
| Wiegand interface Output bi t | 26, 32, 37, 40, 56, 80, 168(Asis) bits format and 8-digit 32, 37, 40 |

| | |
|---|---|
| format | bits format |
| Support Card Type | Mifare (ISO 14443-A, ISO 14443-B) |
| EZ-Link | Output CAN or CSN (Selectable) |
| Mounting | Hook On Bracket |

## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the

receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Caution:** Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

**RF Exposure Information**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

### FAQ

- **Q: What power supply is recommended for the R510 Series NFC Reader?**
  - A: A regulated linear power supply with +12VDC and 300mA is recommended for optimal performance.
- **Q: How do I connect the R510 NFC reader to a controller?**
  - A: Refer to the wiring and color code table provided in the manual to correctly connect the reader to the controller. Match the cable colors to the corresponding terminals.

# Documents / Resources

| | |
|---|---|
|  | ASIS technologies R510 Series NFC Reader [pdf] Installation Guide<br>R510 Series, R510 Series NFC Reader, NFC Reader, Reader |

## References

- User Manual

ASIS technologies

ASIS technologies, NFC Reader, R510 Series, R510 Series NFC Reader, Reader

# Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

## Search:

e.g. whirlpool wrf535swhz

Search