

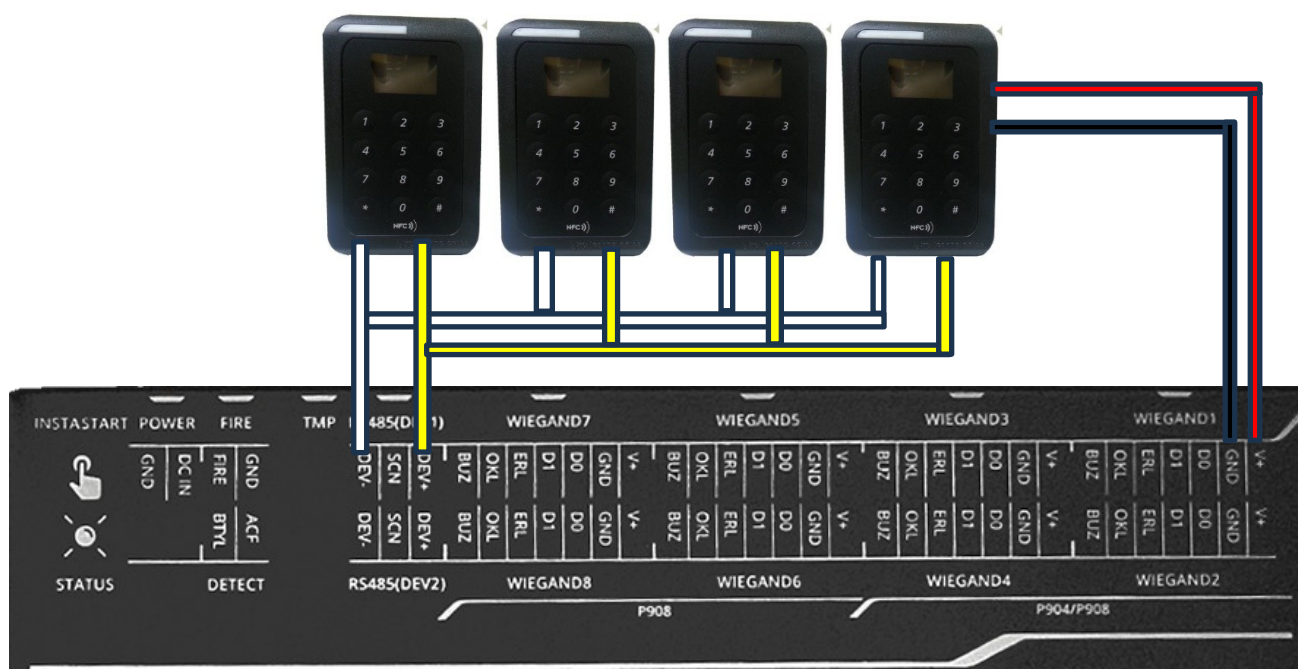


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## R101 Reader Quick Start Guide

### 1.1 Wired to Webentra controller RS485(DEV1)

|             |        |      |        |        |
|-------------|--------|------|--------|--------|
|             |        |      |        |        |
| Color       | Black  | Red  | White  | Yellow |
| Description | Ground | 12V+ | RS485- | RS485+ |



## 1.2 DIP Switch Setting

R101 reader has 8 way DIP switch with function as show in below table.

| Bit | Label               | Function in RS485         |
|-----|---------------------|---------------------------|
| 1   | A0                  | Address bit 0             |
| 2   | A1                  | Address bit 1             |
| 3   | A2                  | Address bit 2             |
| 4   | A3                  | Address bit 3             |
| 5   | Mode RS485/ Wiegand | OFF – Wiegand, ON – RS485 |
| 6   | 8/4 Byte            | OFF – 8 byte, ON – 4 byte |
| 7   | CSN/CAN             | OFF – CSN, ON – CAN       |
| 8   | TST                 | OFF – Run, ON - Testing   |

## 1.3 Reader address setting

| Reader number | Reader address | Bit 1 | Bit 2 | Bit3 | Bit4 | Bit5 |
|---------------|----------------|-------|-------|------|------|------|
| Reader 1      | 80             | 0     | 0     | 0    | 0    | 1    |
| Reader 2      | 81             | 1     | 0     | 0    | 0    | 1    |
| Reader 3      | 82             | 0     | 1     | 0    | 0    | 1    |
| Reader 4      | 83             | 1     | 1     | 0    | 0    | 1    |
| Reader 5      | 84             | 0     | 0     | 1    | 0    | 1    |
| Reader 6      | 85             | 1     | 0     | 1    | 0    | 1    |
| Reader 7      | 86             | 0     | 1     | 1    | 0    | 1    |
| Reader 8      | 87             | 1     | 1     | 1    | 0    | 1    |

## 1.4 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.

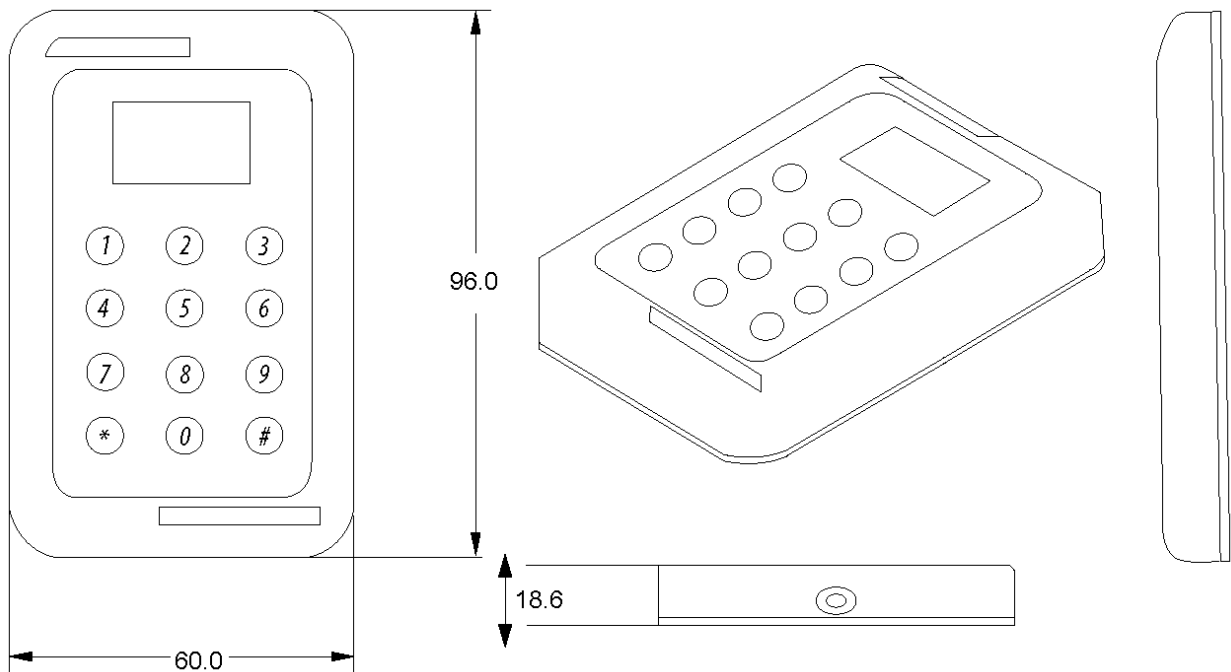


Figure 1 Physical Dimension

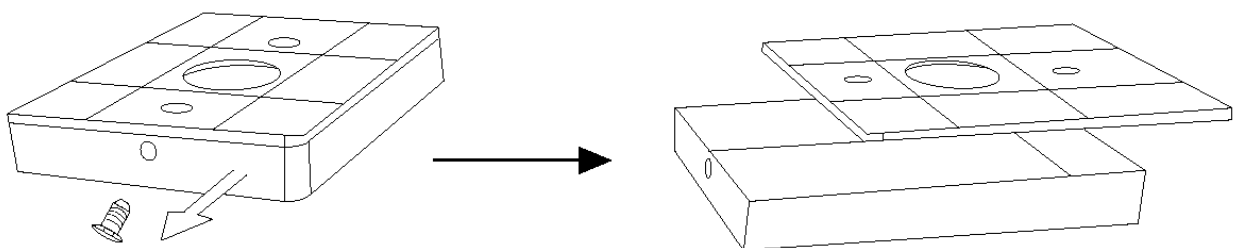
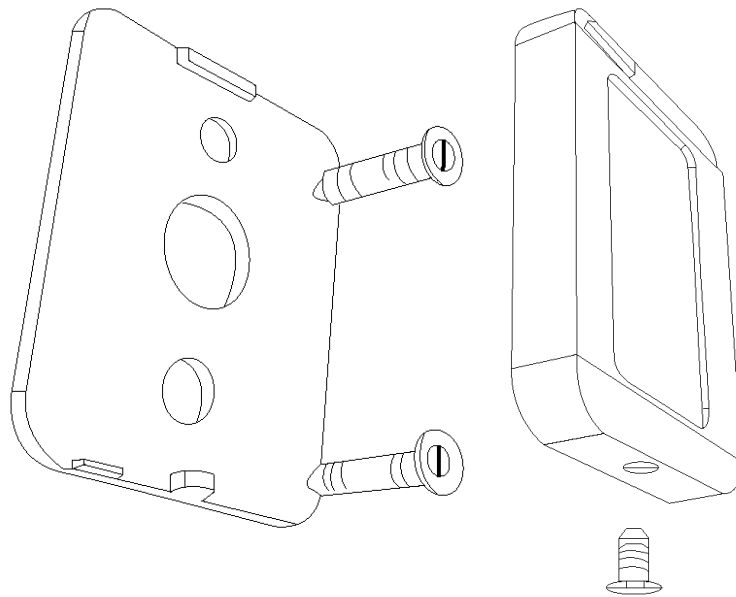


Figure 2 Removal of Cover

To remove the reader's cover, unscrew the screw in the bottom and flip open the cover.



**Figure 3 Mounting Method**

## 1.5 Product Specification

|                             |   |
|-----------------------------|---|
| Power Supply (Recommend)    | Regulated linear power supply, +12VDC, 300mA  |
| Operating Voltage Range     | 12VDC   |
| Operating Current at +12VDC | 85mA (average) – 185mA (peak)   |
| Maximum Cable Distance      | 150meters (500feet)<br>(base on Belden 9538 24AWG 0.6mm, 8 core cable foilshield) (for wiegand interface)<br>(base on Belden 9534 24AWG 06.mm, 4 core cable foilshield) (for RS485 interface) |
| Read Range                  | 2 to 4 cm<br>( Read Range is dependent on local installation, card type )   |
| Transmit Frequency          | 13.56MHz  |
| LED                         | Tri Color – Red, Green, Amber   |
| LCD Display                 | 96 x 64 Graphic LCD (R105/R106)   |
| Buzzer                      | Multi-tone  |
| Operating temperature Range | -20oC to 50oC ( -22oF to 150oF)   |
| Colour                      | Black   |
| Material                    | ABS   |

|                                     |  |
|-------------------------------------|--|
| Weight                              | 350 grams  |
| Dimension                           | 95mm (Height) X 60mm (Width) X 16mm (Thickness)                                  |
| Wire Termination                    | 10 conducting wire at length approx. 300mm                                       |
| Reader Mode                         | Card Only, Card and PIN.   |
| PIN Input                           | 1 – 6 Digits (R105/R106)   |
| Keypad                              | 3 x 4 Keys (R105/R106)   |
| Communication Interface             | RS485 or Wiegand (Selectable )   |
| Wiegand interface Output bit format | 26, 32, 37, 40, 56, 80, 168(Asis) bits format and 8-digit 32, 37, 40 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.