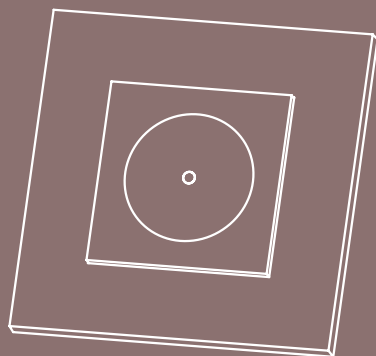


# RD356 PLUS PROXIMITY READER

## INSTRUCTION MANUAL



SMINN

innovative in electronics

## DESCRIPTION

The RD356 PLUS is a proximity reader (radio frequency contactless reader) for KT356 keys or KC356 cards equipped with a security encryption system to be used with new generation control units.

It is developed with state-of-the-art electronic devices that offer a high degree of reliability and operational safety.

Combined with the control units for SMINN readers, it provides the activation/movement command to manoeuvre control devices, alarm control, access control, home automation, etc.

It is suitable for industrial, commercial and/or residential environments.



## OPERATION

The RD356 PLUS reader detects or polls the KT356 key or KC356 card that comes within 5 cm (approx.). It analyses the key code and sends the access request to a new generation control unit (BASE STATION PLUS). The control unit confirms the code and its access privileges. If access is granted, the control panel activates a relay.

The RD356 PLUS reader has a tri-colour LED. It emits red when it does not recognise any nearby key, yellow when it detects a compatible SMINN key or green if access has been granted from the base station.

## APPLICATIONS

The RD356 PLUS reader has been developed for the identification and reading of new generation SMINN RFID keys and cards with secure encryption in access control applications requiring an intermediate level of management.

## INSTALLATION

Check the integrity of the product to be installed.

- Can be installed embedded in the standard mechanism box or with the SMINN surface separator and visors (see accessories).
- It is necessary to keep it away from metallic parts or other similar elements. As a radio frequency device, they may cause interference, limiting range and increasing power consumption.
- The RS-485 BUS offers the possibility of installing equipment over long distances (up to 500 m depending on the connection cable used). It also allows the installation of equipment in parallel up to a total of 4 devices, always depending on the power capacity of the power supply.

THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY DAMAGE CAUSED BY INCORRECT INSTALLATION OR IMPROPER OR NEGLIGENT USE.

## WIRING

The wiring is done with only four wires on the connector located on the rear of the device. Two of these wires are for the power supply and the other two for the data connection to the control (BASE STATION PLUS). See Fig .1.

Positive (+)	Apply the positive pole of the +12VDC power supply
Negative (-)	Apply the negative pole of the power supply
Line (A)	Apply A RS-485 BUS line
Line (B)	Apply B RS-485 BUS line

The RS-485 BUS is operated in Half/Duplex mode with two A and B wires.

All BUS elements must have the same connection. A wires to A wires and B wires to B wires (do not interchange). See Fig .2.

## ADDRESSES

The equipment has a 4-position DIP-SWITCH to choose the address of the reader within the BUS and activate the terminal resistor (in case its the last reader on the bus). Make sure that each reader has a different address and, if applicable, follow the addressing scheme explained in the base station manual.

## USAGE RESTRICTION

They are not guaranteed for use when installed in equipment other than that specified.

THE INSTRUCTIONS FOR USE OF THIS DEVICE MUST BE HANDED OVER TO THE USER, WHO WILL ALWAYS HAVE THEM IN HIS POSSESSION. IF THE USER LOSES THEM, HE CAN REQUEST A COPY OR DOWNLOAD THEM DIRECTLY FROM THE WEBSITE [WWW.SMINN.COM](http://WWW.SMINN.COM).

The manufacturer reserves the right to change the specifications of the devices as well as this manual without prior notice. The device may only be operated by trained and/or suitably instructed personnel.

## WARRANTY

This product has been subjected during its manufacturing process to a complete TEST that guarantees its reliability and proper functioning.

The manufacturer grants the product a warranty of 36 months from the date printed on the product and against any anomaly that the product may present in its appearance or functionality.

Excluded from this warranty are damages caused by third parties, natural causes (flood, fire, lightning, etc.), improper handling or installation, vandalism and, in general, any cause not attributable to the manufacturer.

The scope of the warranty is limited to the repair or replacement of the damaged element. Excluded from the guarantee are the expenses that could be derived from assembly, displacement, transport, parts subject to wear and tear, etc. and in general any expenses that are not for the repair or replacement of the damaged element of the device. The installer/distributor must request from the manufacturer an **RMA** number or authorisation to send the equipment under warranty. Without this prerequisite, the manufacturer will not be able to process or honour the warranty.

## WARNING

The product must be used for its intended purpose and any other use is considered inappropriate. Packaging and containers must NOT be disposed of in the environment. Keep products, packaging, containers, documentation, etc. out of the reach of children. Follow applicable local, national and European regulations. The information contained in this document may contain errors which will be corrected in subsequent editions. The manufacturer reserves the right to modify the contents of this document or the product without prior notice.

## WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In accordance with the European Directive 2012/19/EU about waste electrical and electronic equipment (WEEE), the presence of this symbol (see symbol at the bottom of this text) in the product or in the packaging, means that this article shall not be disposed in local non-classified waste streams. It is the user's responsibility to dispose this product taking it to a collection point designed for waste recycling of electrical and electronic devices. The separate collection of this product helps optimize the waste sorting and recycling of any recyclable material and also decreases the impact on health and the environment.

For more information about the correct wasting of this product, please contact the local authority or the distributor where you acquired this product.



## CE DECLARATION OF CONFORMITY

The company ELSON ELECTRÓNICA, S.A  
Pol. Torrelarragoiti, P6-A3  
48170 Zamudio - Bizkaia (SPAIN)

Declares that

The product **RD356 PLUS** proximity reader

Manufactured by ELSON ELECTRÓNICA, S.A.

Under the  
trademark **SMINN**

For use in Residential, Commercial or light  
industry enviroments.

It complies with the applicable regulations in accordance with Art. 3 of the R&TTE Directive 1999/05/EC, provided that it is used in accordance with its intended purpose and has been subjected to the application of the following standards:

2014/53/EU directive - Radio devices

2014/35/EU directive - Low voltage

2011/65/EU directive - RoHs

2012/19/EU directive - WEEE

2020-06-15 Zamudio

Jose Miguel Blanco Perez  
Chief Technical Officer

## TECHNICAL SPECIFICATIONS

Frequency	13.56 MHz
Power supply	12V DC (10/22V)
Idle power consumption	< 150 mA
Communication	BUS - RS485 (Half/Duplex)
Wiring	4 wire (CAT5 shielded cable recommended)
Maximum distance	> 200 m
Watertight	IP 54
Dimensions	H85 x W85 x Z28 mm
Casing	ABS
Operating temperature	-20/ +70°C

Fig. 2 BUS wiring

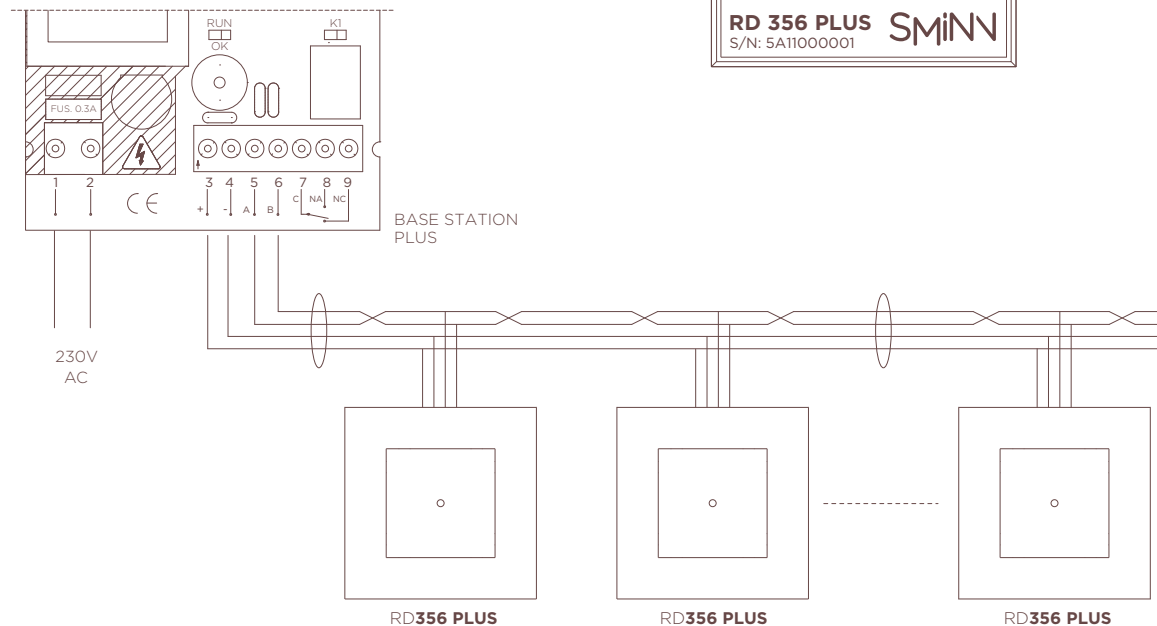
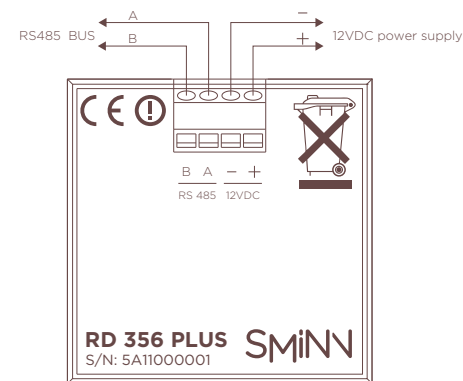


Fig. 1 Terminal block



**SMINN**

innovative in electronics

**Elsón Electrónica**

T. +34 944 525 120

www.sminn.com

info@sminn.com

Pol. Ind. Torrelarragoiti, P6 · A3  
48170 Zamudio - Vizcaya (SPAIN)

