

# TECHNICAL MANUAL

## V-Reader

Reader





[www.vauban-systems.fr](http://www.vauban-systems.fr)

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# 01. ■ Thank You

**Dear client,**

We would like to thank you for purchasing a **"V-READER"** reader created by the French company, VAUBAN SYSTEMS®.

Shown in our products.

To find out more about our range, please visit our website at **[www.vauban-systems.fr](http://www.vauban-systems.fr)**.

We wish you a trouble-free installation.

**VAUBAN SYSTEMS®**



## 02. Information and recommendations

**VAUBAN SYSTEMS declares that the V-Reader range complies with the fundamental requirements of Directive RED 2014/53/EU and RoHs 2011/65/EU.**



### Configuration on VISOR® :

- › **Pour le V-Reader :** V2.0.0.30 minimum and the firmware of the **control unit must be V3.5 at a minimum.**
- › **Pour le V-Reader KP :** V2.0.0.33 minimum and the firmware of the **control unit must be V3.8 at a minimum**
- › This device complies with Part-15 of the FCC and with the ISSED licence without RSSs.
- › Its operation is subject to the following conditions
  - 1) This device must not cause any dangerous interference.
  - 2) This device must accept any received interference, including those that can cause a unwanted functioning.

**Note:** The manufacturer is not held responsible for radio or TV interferences caused by unauthorised modifications on the equipment. Such modifications can void the right to use the equipment by the user.

- › This device complies with security norms regarding the exposure to RF, in compliance with RSS-102 issue 5 for conditions of use.



- In conformity with regulations of the Environment Code (sub-section 1, paragraph 1, art. R 543-171 and following), the manufacturer finances the collection, clean-up and recycling network from **DEEE** established by ESR-RECYLUM to which the manufacturer has adhered and to which he transferred his regulatory obligations as a producer.
- › We suggest the owners of used equipment that do not wish to use them anymore, to send them to the DEEE control unit getting in touch with ESR-RECYLUM in order to receive an additional free collection and recycling solution for these used equipments. More information here: **[www.recylum.fr](http://www.recylum.fr)**.

# 03. Technical characteristics

## 03.1 PRODUCT INFORMATION



Connector	Cable exit	Type
		RS485
4	Brown	0 Vdc
5	Red	+Vcc (+9 Vdc à +15 Vdc)
2	Grey	NC
1	Blue	L+
6	Yellow	L -
3	Green	
8	Orange	
7	White	

## 03.2 POWER SUPPLY FEATURES

Use AC/DC supply, LPS-type, Limited power source (according to IEC EN 60950-1 Ed2) or ES1, PS1-type (according to IEC EN 62368-1)

**Power supply:** Range: +7 Vdc to +28 Vdc | Typical: 12 Vdc

**Max consumption at 12 Vdc:** 140 mA

### 03.3 FEATURES

**Communication:** RS485 (L+ & L-)

**Connector exit:**

> 8 female contacts 28-22 AWG to be crimped (Wurth Elektronik 62400113722DEC)

> Double-row female connector with 8 points (Wurth Elektronik 624008213322)

(Use a crimping tool: WURTH ELEKTRONIK 600624228220)

**Cable exit:** TRANXALARM - 8 x 0,22 mm<sup>2</sup> – Length 3,05 m

**Protection:** IP65 level without Buzzer connections

### 03.4 OPERATING TEMPERATURE

Operating room temperature: -20 °C to +70 °C

## 04. Buzzer / Led

The buzzer and LED from the reader are steered by communication protocol RS485. There is no need to connect any additional cables.



## 05. ■ Anti-pullout function

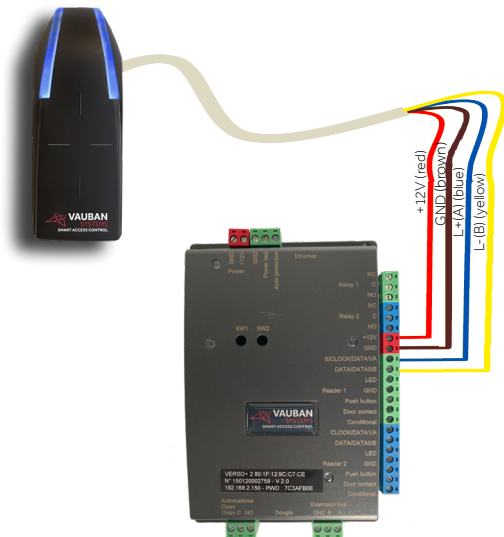
### **The pullout is detected by an accelerometer.**

Once it is detected:

- › The reader will perform the operations configured in VISOR®.

Note: turn on the reader when it is in its final position to start the accelerometer in the right position.

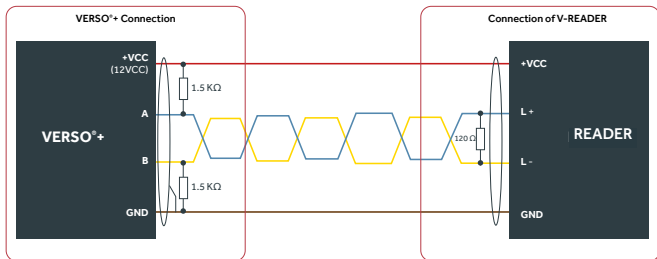
# 06. ■ Connection of the reader on a VERSO®+ control unit



**NOTE:** If you are using an external power supply to power your proximity scanners, ensure that you connect all grounds to the ground on the control unit.

## INFORMATION:

- › 4 wires (3 pairs are recommended)
- › Maximum distance: 100 m
- › Type of cable: 0.9 mm (we recommend SYT cables)



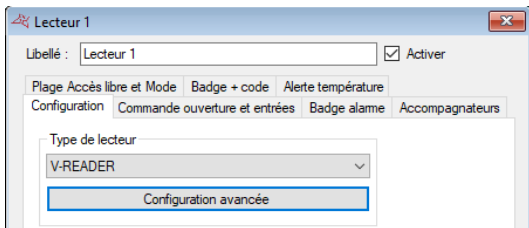
## Installation precautions:

- › Connection cable must be AWG20 (8/10e), SYT1 paired-type, F/UTP shielding at a minimum.
- › The shielding of the cable must be connected to the GND supply on the **VERSO+** side.
- › The connection of an end-of-the-line resistance of **120 Ω** must be performed on the **V-READER** side, the 2 resistors of **1.5 KΩ** must be installed on the central unit side.
- › **A** and **B** signals of the RS485 bus must be connected on the same twisted pair.
- › **+VCC** and **GND** supply must be connected on the same twisted pair.

- › All cables and bus cable pairs that are not used must be connected to the GND in each end.
- › The connection of the cables to the GND and to each end is mandatory.
- › The supply GND must be connected to the GROUND.
- › Move away, when possible, the digital transmission or power origin cables reader (sector or high-tension). The perturbations they can cause vary according to their radiation power and their proximity to the readers.
- › Distance between the 2 readers: parallel planes: 30 cm - same plane: 40 cm - perpendicular planes: 30 cm.
- › If the reader is fixed on a metallic surface, it is possible to obtain a reduction of the reading distance.  
**Note :** provide a spacer
- › Use a ferrite (2 passages) on the cable (supply and data).  
Example: reference 74271222 WURTH ELEKTRONIK.
- › Unplug the cables or the reader connector BEFORE turning on or off.

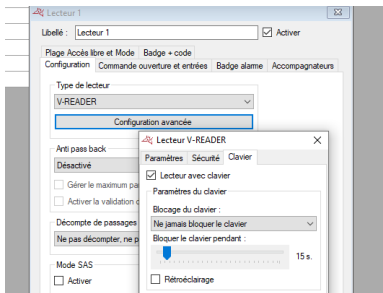
# 07. Configuration on VISOR®

## 07.1 V-READER



**Note :** Configuration on VISOR®: V2.0.0.30 minimum and the firmware of the control unit must be V3.5 at a minimum.

## 07.2 V-READER



**Note :**  
Configuration on VISOR®:  
V2.0.0.33 minimum and  
the firmware of the  
control unit must be V3.8  
at a minimum.

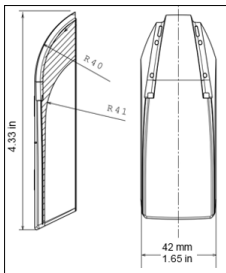
## 08 ■ Fixation

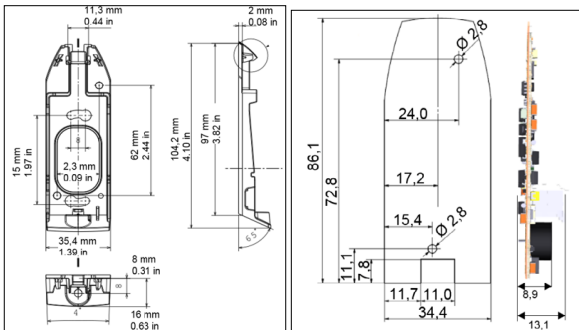


- › Pass through the cables on the base cavity.
- › Fix the base on its final position.
- › Connect the reader.
- › Test if the device is working properly.
- › Place the reader on the base (clip the higher part and then move it downwards).
- › Fix the reader with 2 screws and the connector that was provided.

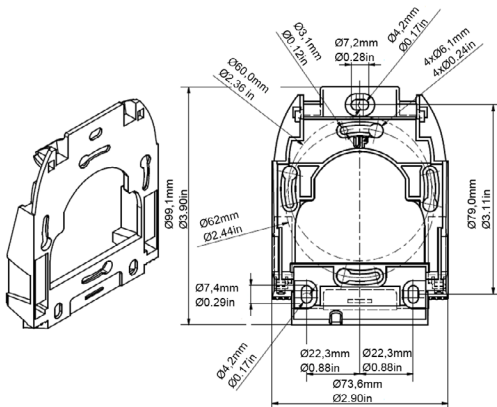
## 09 ■ Dimensions

### V-READER fixation base





## V-READER KP fixation base



# 10. Free installer hotline

## **A technical question?**

Contact our free hotline!







## **Address**

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## **Email**

Contact@vauban-systems.fr



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## NOTES

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