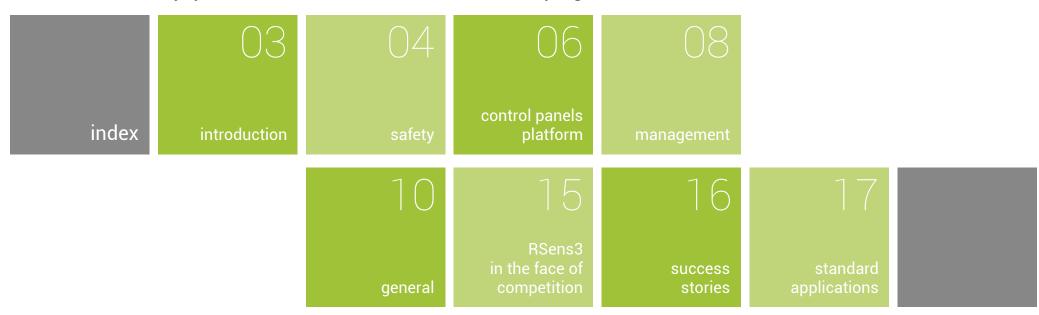


### Radio Sens 3

roller door shutter safety system with communication via radio without safety edges or cables



be a step ahead with technology and imagination **jcm**technologies

### introduction

a worry-free door, without major installation works, noise, trenching, dust, ...

The door will no longer be a danger for your family. It detects impact against an obstacle and reopens without causing any damage. It is remotely controlled by radio so requires so additional installation works.

There is also no need for annoying sensors that prevent good insulation and reduce the home's energy efficiency. It is simply mounted on the inner side of the door and put into operation.

Keep in mind that a spiral cable may be dangerous for children and animals, as well as generating expenses in technical assistance and maintenance







The RSens3 system complies with standard ENISO 13849-1:2008 Cat. PLd, EN 12978:2003+A1:2009

Plug & Play system!

# safety

the priority of RSens3 is your peace of mind, so if the door moves, you can be sure that it is safe because:



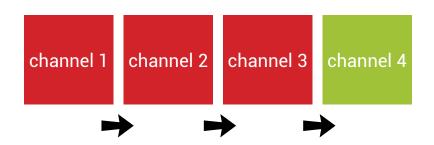




The communication system is always shown to be working. **Constant two-way link via radio.** 

## safety

the priority of RSens3 is your peace of mind, so if the door moves, you can be sure that it is safe because:







Multi-frequency system with 4 communication channels and automatic channel management. If 400 ms are exceeded, the system passes into SAFE mode.

Nothing disrupts the system and in the case of interference in communication, the system seeks a free channel or passes into safe mode.

You have no need to worry about the batteries. If they become flat or move, the door immediately passes into safe mode, but you will be able to move it in dead-man control mode using the control panel push buttons until the batteries are changed.

The low battery warning is on the control panel receiver. This beeps four times every 5 seconds to indicate low battery level.

The batteries are easily and rapidly replaced.

### control panels platform

the priority of RSens3 is your peace of mind so if the door moves, you can be sure it is safe because:



The RSens3 safety system in a Versus control panel is not incompatible with the other accessories that your door needs thus ensuring ease of installation and safety. Moreover, Versus is not only easy to install but also to program thus saving time and improving the quality of its service.

### Just follow the following three steps to program the RSens3 system on a Versus control panel:

- 1. Program the transmitter at the receiver.
- 2. System programming: program door travel with the RSens3 system connected.
- 3. Programming verification: check that the door reverses its movement when it hits a rigid object.



## control panels platform

versus control panels are designed for ease of use









Buttons
Functioning in dead-man mode



When you open your garage door, the panel light also comes on helping you to see when manoeuvring the vehicle.

The light on the panels is optional and the time that it stays on after each operation can be adjusted.



If the remote control is not working, you can open or close the door with the buttons on the cover. These buttons are optional.

**Dead-man functioning mode:** the door will not remain open if a malfunction occurs, since you can force closing by pressing and holding down the buttons on the control panel until the problem is solved.

### management

everything is designed for your peace of mind, the RSens3 system constantly adjusts to variations in the door to avoid false detections and annoying wait times for closing the door.



POTENTIOMETER POSITION	SENSITIVITY	EXAMPLE OF APPLICATION
0	MAXIMUM	SLOW DOORS (0,1 m/s)
5	AVERAGE	NORMAL SPEED DOORS (0,5 m/s)
9	MINIMUM	RAPID DOORS (>1 m/s)





This is why it automatically adjusts to variations in door movements, temperatures, small blows, erosion of the rails, etc.

Maximum tolerance is a deviation of 5%, but if the maximum theoretical authorised percentage is exceeded, it just needs to be reprogrammed.



You can also adjust the sensitivity of impact detection and thus refine each installation.

In residential roller door applications, you are advised to set the level of sensitivity at 2 or 3.

Adjust the maximum and in this way you will not need to worry about the annoying draughts. If the ground is irregular or slopes it also works since you can set the inhibition zone to avoid incorrect activations when the door arrives on the ground.

Inhibition zone preset by default at 4m from the ground.

### management

everything is designed for your peace of mind, the RSens3 system constantly adjusts to variations in the door movement prevent false detections and annoying wait times when closing the door.





Would you like an anti-intrusion alarm and did not ask it from the maker? Now you can have it

With Versus Prog you can have the door just how you want it. You can refine any parameter on the control panel to fully optimise the door.

### additional advantages of RSens:



The battery indicator provides you with the certainty that the batteries are functioning correctly. When this indicator flashes the batteries need to be changed.

Warning beep every 5 seconds.

Reprogramming is not necessary when the batteries have been replaced.



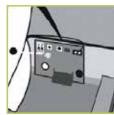
Save on installation and maintenance costs with the most competitive latest-generation technology.

It can be programmed using three buttons.

- 1: start programming.
- 2: program the RSens3 transmitter.
- 3: close programming.







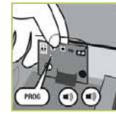
LED LIGHTS UP



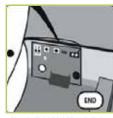
PRESS TRANSMITTER PROG



A BEEP AND PROGRAMMED



PRESS RPROG BUTTON



LED LIGHT GOES OFF AND END



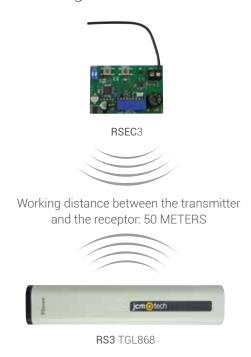
Easy installation, no annoying installation works and trenching to lay cables since no cables are needed ... and it is very rapidly programmed!







additional advantages of RSens:



The maximum working distance between the RSens3 and the RSec3 is 50 meters in an open area. You should take into account that it may be less in some installations due to metal parts, the position of the control panel, etc.

#### testing radio coverage





You can test the quality of radio coverage during the first 25 times you operate the door, by checking the green led indication on the transmitter (it lights up in green if coverage is sufficient and flashes if coverage decreases in places).

After these 25 operations, you can check coverage by pressing the PROG button.

### additional advantages of RSens:



The RSens3 transmitter is powered by two alkaline AA batteries so that they can be easily replaced, whilst the RSec3 is powered by direct connection to the control panel.



Operating temperature range:





In optimum conditions, used in a single-family home, these last for around one year.

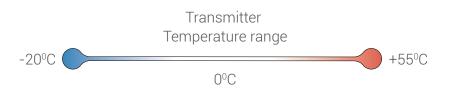
#### **BATTERY LIFE TABLE**

Battery life table (reference values with alkaline batteries and room temperature of 25°C)

#### operations/day

		300	200	100	50	25	10	5	4
Operation time (s)	3	180	230	300	370	420	450	470	475
	5	130	170	250	330	380	430	460	470
	10	х	104	170	250	320	410	440	450
	15	х	х	125	200	275	375	425	435
	20	х	х	х	170	250	350	410	420
	25	х	х	х	145	220	325	385	410
	30	х	х	х	х	200	300	375	390

maximum battery days



additional advantages of RSens:



RS3 TGL868 has a watertightness level of IP22 and RS3 T868 an IP65

Level	Protection	Effectiveness	
0	-	No protection against penetration of objects	
1	>50 mm	Any large body area, such as shoulder or hand, but no protection against the deliberate connection of any part of the body	
2	>12,5 mm	Fingers or similar objects	
3	>2,5 mm	Tools, thick cables, etc.	
4	>1 mm	Majority of cables, screws, etc.	
5(K)	dust	There is no full guarantee against penetration of dust, but it is quite satisfactory; full protection against contact	
6(K)	fine dust	No penetration of dust; full protection against contact	

Protection of the device against penetration by dangerous elements



IP65	(RS3	T868)

Level	Protection	Details
0	No protection	_
1	Drops of water	Drops of water (drops falling vertically) will not cause any damage to the device.
2	Water dripping at an angle of 15°	Vertical drops of water will not cause any damage to the device when the angle at which they fall is less than 15° in relation to the normal position.
3	Spray of water	Water that falls at any angle of more than 60° from the vertical will not cause damage.
4	Jet of water	A jet of water against the protective cover of the device from any direction will not be damaging
5	Strong jet of water	A strong jet of water from a nozzle against the protection of the device from any direction will not be damaging
6	Floods of water	Sea water/waves or powerful surges against the protective cover of the device from any direction will have no great damaging effect in quantitative terms
7	Immersion at 1 m	There will be no great damaging effects in quantitative terms for the device due to immersion in water in determined conditions of pressure and time (submersion at 1 m)
8	Immersion at more than 1 m	There will be no damage in quantitative terms for the device due to immersion in water in conditions defined by the specifications or the manufacturer (submersion at more than 1 m)

Protection of the device against damaging penetration of water









ISO 9001

EUROPEAN UNION CERTIFICATE

NF

ΤÜV

# RSens3 in the face of competition

The points that we can highlight that make RSens3 the safest system are:

1

The only system on the market capable of detecting obstacles without external sensors or cables complying with the standard EN ISO 13849-1:2008 Cat. 2 PLd, EN 12978:2003+A1:2009

3

If the battery falls out, the door stops for the time determined by 2

Simply mount the device in the middle of the roller door, program it and start it up. The RSens3 system will do the rest.

4

on the radiofrequency the device will pass into secure mode within the time fixed by the standard

### success stories

RSens3 was designed in the year 2007 and has been improved since then by JCM.

It was officially presented at the Stuttgart R+T Fair (2011) and subsequently marketed for application in the sector of residential roller doors in several countries.

# standard applications





The standard door must not be wider than 4 meters. There must be a tolerance of at least 1 millimetre between the last and last but one slat. The door must move at an even speed (a motor of 17 rpm or more is recommended). There must be no variation of more than 5% in repeated movements of the door. Limit switches must be taken into account.

