

# Safety solutions configurator **2015**

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**Version: 1.1**



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## PAS (PEDESTRIAN ALERT SYSTEM)



The PAS solution minimises any risks of collisions between forklifts and pedestrians in common work areas.





The PAS KIT includes control elements to be installed in each of the forklifts:

<p><b>PAS KIT</b></p> <p>(Activator with 2 antennas + Test Tag + Inhibitor)</p> <p><u>Activator:</u> Terminal fitted with 2 LF antennas – 24V</p> <p><u>Test Tag:</u> Fault output in the event of not detecting the activator on the forklift, always enabling fail-safe operation</p> <p><u>Inhibitor:</u> Avoid the detection of the driver's tag.</p>	<p><b>PN09233</b></p>	
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All people to be protected, must be equipped with a Personal TAG.  
You may choose between T-10 and T-10 Badge models:

<p><b>PERSONAL TAG T-10</b></p> <p><i>The T-10 Personal Tag is a small, long lasting, active RFID device that allows detecting a pedestrian.</i></p>	<p><b>PN09394</b></p>	
<p><b>PERSONAL TAG T-10 Badge</b></p> <p><i>Personal Tag T-10 Badge, It incorporates a space for a conventional corporate company card (not included).</i></p>	<p><b>PNC00108</b></p>	

## Accessories for forklifts:

<b>DC/DC Converter</b> <i>If the power of the truck is different from 24V DC.</i>	<b>View section of accessories</b>	
<b>Warning light and warning Buzzer</b> <i>Recommended install a warning light and a warning buzzer. Warning light image: PN08922 and warning buzzer: PN07371</i>		

In order to verify the correct state of the tags to start working, it is very useful, install a **VERIFICATION ANTENNA AV-50**, together with the software.




## PCS (PEDESTRIAN CROSSING SAFETY)

The PCS solution minimises any risks due to collisions between forklifts and pedestrians in areas of high pedestrian traffic.









### OPTION 1: forklifts equipped with PAS KIT

Install a module of TZ2-TAG at each point of risk. When approaching a forklift, the TZ2-TAG activate a signal, which can be connected to an indicator light to inform pedestrians that a forklift is near (the forklift may receive such information).

<b>TZ2 TAG</b> <i>The TZ2 Tag is an RFID device that allows detection of a forklift to enter the security zone generated by the AC-50. When the forklift is in the detection zone, the TAG TZ2 activates a relay.</i>	<b>PNC00066</b>	
<b>TZ2 TAG Power Supply</b> Input 90-230 V AC / Output 24 V DC	<b>PNC00096</b>	
<i>Different options of warnings lights</i>	<b>View section of accessories</b>	

## OPTION 2: trucks not equipped with the PAS system

If we don't have installed PAS equipment in the forklifts, install an ACTIVATOR AC-50 at each point of risk. Pedestrians wear a TAG. And, optionally, equip each forklift with a TZ-50 TAG. When the Activator detects a TAG of a person or a forklift, it activates a warning light signal.

<b>AC-50 Activator</b> (1 internal antenna)	<b>PN08446</b>	
<b>TEST TAG TT-50</b> <i>An active device which ensures the correct functioning of the system.</i>	<b>PN09100</b>	
<b>PERSONAL TAG T-10</b> <i>The T-10 Personal Tag is a small, long lasting, active RFID device that allows detecting a pedestrian.</i>	<b>PN09394</b>	
<b>TZ2 TAG</b> <i>The TZ2 Tag is an RFID device that allows detection of a forklift to enter the security zone generated by the AC-50. When the forklift is in the detection zone, the TAG TZ2 activates a relay.</i>	<b>PNC00066</b>	
<b>TZ2 TAG Power Supply</b> Input 90-230 V AC / Output 24 V DC	<b>PNC00096</b>	
<i>Different options of warnings lights</i>	<b>View section of accessories</b>	




## NAS (NARROW AISLE SAFETY)

The Narrow Aisle Safety (NAS) solution minimises the risks of collision between forklifts in narrow work spaces.



### The forklifts must be equipped with a PAS KIT

Place a T22-TAG module at the end of each aisle. When approaching a forklift equipped with the PAS system, the T22-TAG activates a signal, which can be connected to an indicator light to inform the other forklift (or pedestrians, if any), of the situation of the truck.

<b>T22 TAG</b> <i>The T22 Tag is an RFID device that allows detection of a forklift to enter the security zone generated by the AC-50. When the forklift is in the detection zone, the TAG T22 activates a relay.</i>	PNC00066	
<b>T22 TAG Power Supply</b> Input 90-230 V AC / Output 24 V DC	PNC00096	
<i>Different options of warnings lights</i>	View section of accessories	






## BS (BLIND SPOT)

The BS solution minimises any risks of collisions between forklifts and pedestrians in poor visibility areas.



### OPTION 1: forklifts equipped with PAS KIT







Place a TZ2-TAG at each intersection or point of risk. When approaching a forklift, the TZ2-TAG activate a signal, for connecting to a warning light, and inform pedestrians, there is a forklift nearby. We can install different TZ2-TAG at an intersection and make combinations of signalling.

<b>TZ2 TAG</b> <i>The TZ2 Tag is an RFID device that allows detection of a forklift to enter the security zone generated by the AC-50. When the forklift is in the detection zone, the TAG TZ2 activates a relay.</i>	PNC00066	
<b>TZ2 TAG Power Supply</b> Input 90-230 V AC / Output 24 V DC	PNC00096	
<i>Different options of warnings lights</i>	<b>View section of accessories</b>	



## OPTION 2: Install the PAS system at the intersection

If we don't have installed PAS equipment in the forklifts, install an ACTIVATOR AC-50 at each point of risk. Pedestrians wear a TAG. And, optionally, equip each forklift with a TZ-50 TAG. When the Activator detects a TAG of a person or a forklift, it activates a warning light signal.

<b>AC-50 Activator</b> (1 internal antenna)	<b>PN08446</b>	
<b>TEST TAG TT-50</b> <i>An active device which ensures the correct functioning of the system.</i>	<b>PN09100</b>	
<b>PERSONAL TAG T-10</b> <i>The T-10 Personal Tag is a small, long lasting, active RFID device that allows detecting a pedestrian.</i>	<b>PN09394</b>	
<b>TZ2 TAG</b> <i>The TZ2 Tag is an RFID device that allows detection of a forklift to enter the security zone generated by the AC-50. When the forklift is in the detection zone, the TAG TZ2 activates a relay.</i>	<b>PNC00066</b>	
<b>TZ2 TAG Power Supply</b> Input 90-230 V AC / Output 24 V DC	<b>PNC00096</b>	
<i>Different options of warnings lights</i>	<b>View section of accessories</b>	

## CAS (COLLISION AVOIDANCE SYSTEM)

The CAS solution minimises the risks of collision between forklifts.




### Forklifts equipped with PAS KIT

Different forklifts must be equipped with the PAS system.

This system can be active for standard pedestrian detection.

The settings for the system reports that other truck is near your area, it's the purpose for this firmware. The devices need to have this program installed (Order with CAS Firmware it is mandatory)

The PAS equipment to be installed in each forklift.



<p><b>PAS KIT</b></p> <p>(Activator with 2 antennas + Test Tag + Inhibitor)</p> <p><u>Activator:</u> Terminal fitted with 2 LF antennas – 24V</p> <p><u>Test Tag:</u> Fault output in the event of not detecting the activator on the forklift, always enabling fail-safe operation</p> <p><u>Inhibitor:</u> Avoid the detection of the driver's tag.</p>	<p><b>PN09233</b></p>	
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## VERIFICATION ANTENNA AV-50

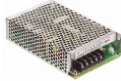


For all of the solutions that incorporate personal tags it's advisable to have a verification antenna AV-50.



### EQUIPMENT

	PN	Image
<b>AV-50 Tag verification antenna</b> <i>A device used to check and record the proper functioning of RFID tags and batteries.</i>	PN09101	
<b>SW-10 Register software</b> <i>Record of tags detected, record of employees who have checked the tag and the battery condition</i>	PN9252	

## ACCESORIES

ACCESORIES	PN	Imagen
DC/DC Converter Supply 9-18V to 24V	PN08915	
DC/DC Converter Supply 19-36V to 24V	PN08916	
DC/DC Converter Supply 36-72V to 24V	PN08975	
DC/DC Converter Supply 72-144V to 24V	PN09267	
TZ2 TAG Power Supply Input 90-230 V AC / Output 24 V DC	PNC00096	
Corrugated tube protection LF antenna cable (5m)	PNC00097	
Cable extension 5m Antenna 2.4 Ghz	PNC00098	
Warning Buzzer (continuous beep)	PN07371	
Warning Buzzer (intermittent beep)	PNC00064	
Warning light (intermittent orange)	PN08922	
Warning light (intermittent blue)	PNC00063	
Warning light (RGB + buzzer)	PNC00086	