

# Pedestrian Alert System (PAS)

**Improve safety** for pedestrians with PAS -  
a proximity alert system for forklifts and  
pedestrians



**TRACK, MEASURE , MANAGE**

# Pedestrian Alert System

**Improve safety** for pedestrians with PAS – a proximity alert system for forklifts and pedestrians

- **PAS** warns forklift truck drivers when it detects pedestrians at specified distance.
- **Reduces accidents and promotes safer driving!**
- Unique and proven RFID technology



PAS Tag worn by pedestrians

PAS Activator & Warning Light

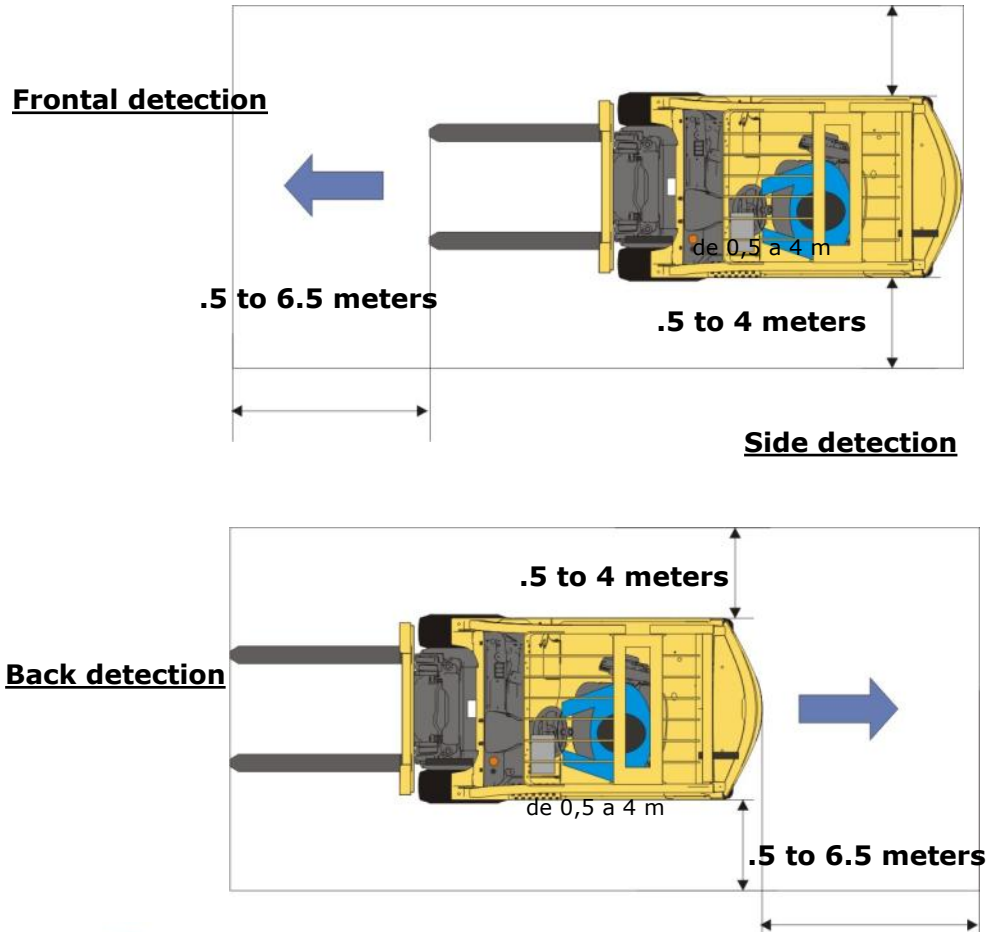


# MAIN OPERATING CHARACTERISTICS

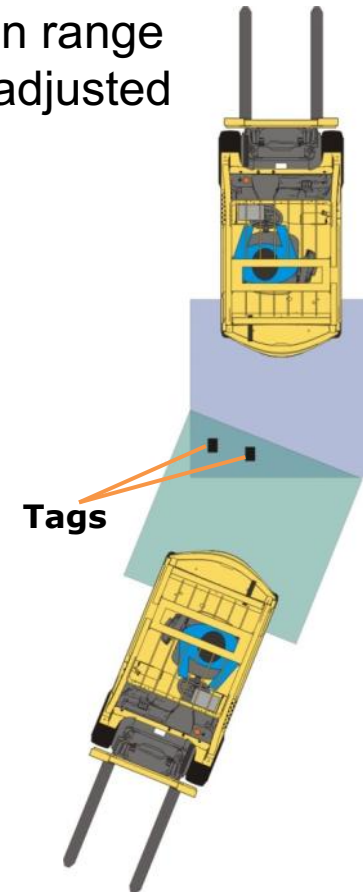
- The Pedestrian Alert System (PAS) is a solution that warns forklift truck drivers when it detects pedestrians
- There is also the option to have forklift to forklift detection as well in the range of 3-25m. This distance is not settable however.
- Pedestrians must wear electronic tags (KEYFOBS) that are detected by a device on the forklift warning the driver of the risk
- Detection of pedestrians in the area of operation of forklift trucks:
  - Frontal detection adjustable from 0.5 to 6.5 meters
  - Back detection adjustable from 0.5 to 6.5 meters
  - Side detection of up 4 meters
- The ideal parameters for the system for effective detection are when the top speed of the truck is a maximum of 10km/h and the maximum size of the truck is 4T
- When these parameters are exceeded or if there is a large amount of shielding there may be a need to fit a PAS Repeater. The PAS Repeater will boost the detection zone between the forklift and pedestrian.
- Also placing the LF Antennas together on the front of the forklift can add up to 2 metres of detection zone for larger vehicles.



# PAS Detection Zone



Maximum –  
detection range  
can be adjusted  
smaller



# SYSTEM COMPONENTS

Based on RFID and wireless technology from CLAITEC:





# PERSONAL TAG FEATURES

- The personal key fob T-10 is a small RFID device-that is carried by pedestrians in the workplace
- Personal tag is detected when it is within the detection area of the forklift truck equipped with PAS
- Indicator light illuminates when within detection range of an activator
- Manual push button gives voluntary warnings to nearby forklift (20m)



# Detection Actions

Two 24 VDC outputs from the Activator are powered when a tag is detected to activate a light and/or buzzer



LIGHT / BUZZER



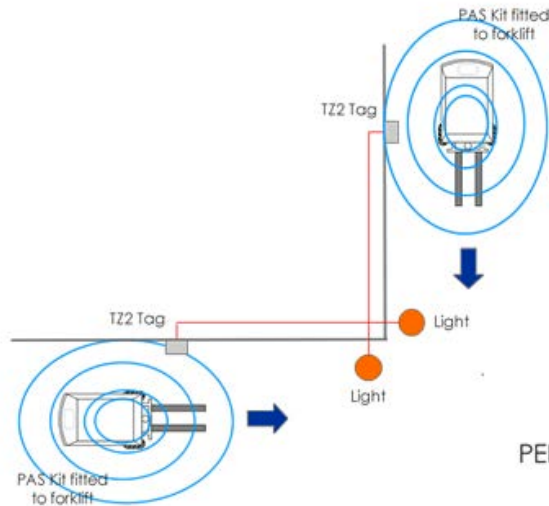
**REDUCES SPEED  
AUTOMATICALLY**  
(If the forklift models permits)

If speed limiting available, one relay could be used to trigger a slow down of the forklift on detection

# PAS Intersection Solutions

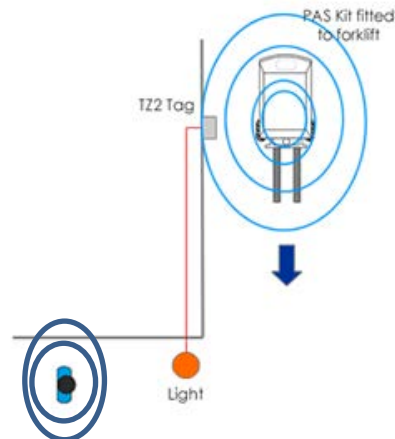
## WARNINGS AT INTERSECTIONS USED BY FORKLIFT TRUCKS AND PEDESTRIANS

### FORKLIFT - FORKLIFT CROSSINGS



1. Mounted PAS kit on the Forklift with a TZ2 Tag mounted on the wall or post
2. Pedestrians carry tags and are detected by the forklift
3. TZ2 tag can trigger warning lights or alarms when forklifts are in the area

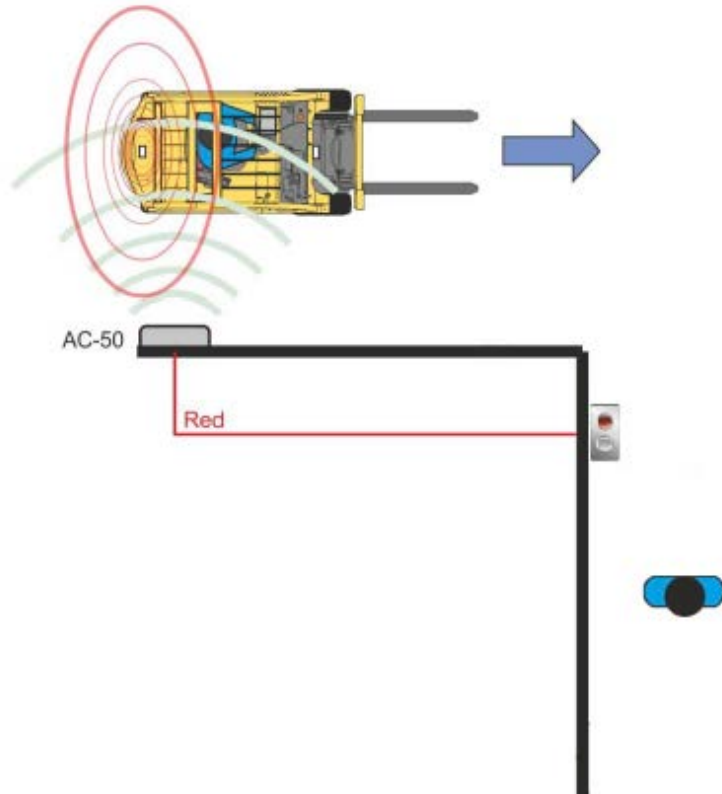
### PEDESTRIAN - FORKLIFT CROSSINGS



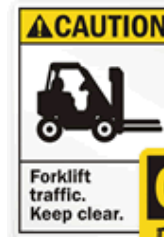


# PAS Intersection Solutions

## WARNINGS AT INTERSECTIONS USED BY FORKLIFTS

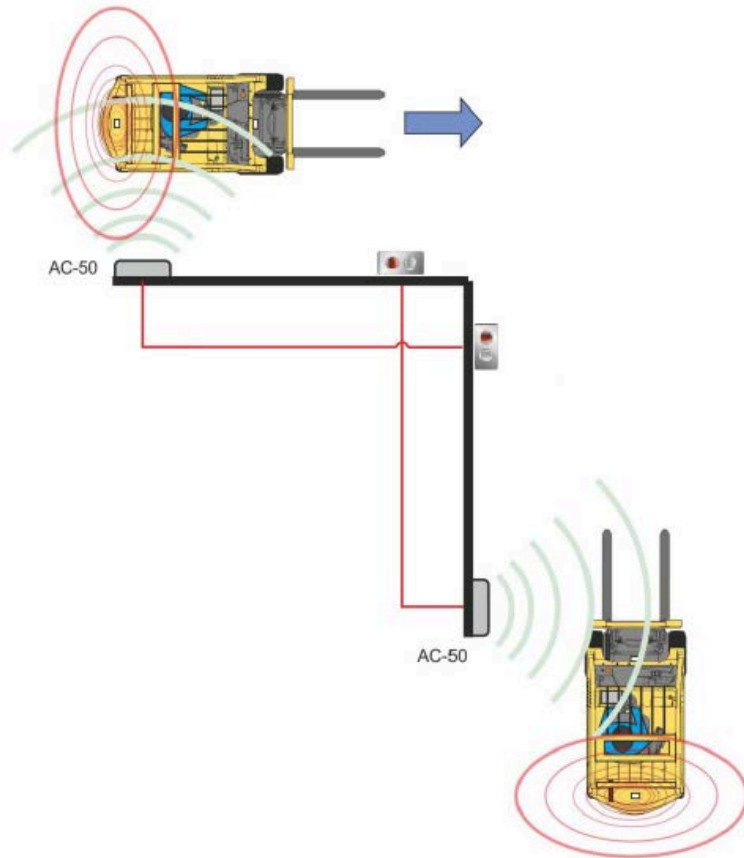


1. Mount Activator unit on walls or posts
2. Trucks and pedestrians carry tags
3. Activator can trigger warning lights or alarms when pedestrians or trucks are in the area



# PAS Intersection Solutions

## WARNINGS AT INTERSECTIONS TO AVOID COLLISIONS BETWEEN FORKLIFTS



1. Mount Activator unit on walls or posts
2. Trucks are fitted with a TZ Tag
3. Activator can trigger warning lights or alarms when trucks are in the area



# Key Fob Verification Station

- ✓ Checks battery condition of key fob
- ✓ Software keeps record of fobs, timestamp, condition

**Green Led indicates Key fob ok**

**Red Led indicates Low battery**



Battery Verifier				
Service Status: Connected		USB Device: Connected		Battery Verifier: Connected
9:25:06 AM - Verifier: 5, Tag Number: 01 17 00 03 00 00 00 D9, Battery level: 2.68 V, LOW BATTERY				
9:25:01 AM - Verifier: 5, Tag Number: 01 17 00 01 00 00 08 F0, Battery level: 2.96 V				
9:24:52 AM - Verifier: 5, Tag Number: 01 17 00 01 00 00 08 80, Battery level: 2.90 V				
9:24:22 AM - Verifier: 5, Tag Number: 01 17 00 03 00 00 00 D9, Battery level: 3.16 V				
Time of record	Number of AV-50 Verifier	Registered T-10's MAC	Battery's level	Battery's status

# Pedestrian Alert System

**PAS warns forklift truck drivers when it detects pedestrians at specified distance.**

**Reduce accidents and promote safer driving!**

Great for use in areas such as:

- Loading docks
- Areas with limited visibility
- Forklift and pedestrian shared work areas



**PAS Pedestrian Tag**

**PAS Driver Tag & Beacon**



# Simple Installation

a universal RAM mounting kit, bracket and screws provided



Forward and back antennas



Activator +  
Light Alarm





# Successful Installations in Europe since 2009

The following are some of the clients Claitec has implemented safety solutions for. The implementation of our systems in widely renowned international brands is the best guarantee we can offer our clients.

