



Operator assist system with Pedestrian and Object Detection – Including truck slow down\*



# Assisting Operators by providing visual and audible alerts along with truck slowdown for awareness while operating.

The SEnS+ camera has been exclusively designed for forklifts to detect objects and pedestrians in the detection range. The system supports your operation by notifying the operator with a warning buzzer and warning lights. In addition to the system notifications, the system can control the traveling speed and slows the truck for pedestrians and objects in specific conditions.



130°

# Detects pedestrians by distinguishing them from objects

Maintains the efficiency of your operation by detecting pedestrians and objects



#### 3 Levels of Notifications

Audible notifications have three distinct levels based on the distance of the obstacle



Traveling speed of the truck is controlled according to the detected obstacle, speed, and direction of the truck

Supports your operation with clear notifications and truck speed control





Detection range is adjusted automatically based on the traveling speed, steering direction, and area of the obstacle

This minimizes unnecessary notifications

# Wide detection range

- 130\* (degrees) field of view
- Maximum Detection Distance of 10 meters (32 feet)
- Detection range can be customized according to work environment



# **Detects unspecified obstacles**

No tags for detection required



<sup>\*</sup> SEnS+ controls the operation by applying regenerative braking.





smart environment sensor plus

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Distinguishes pedestrians from objects

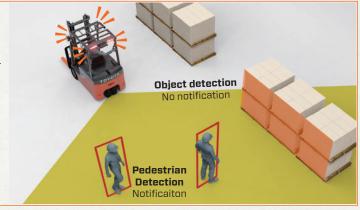
The camera is exclusively designed for forklifts to detect pedestrians by distinguishing them from unspecified objects in the range of detection. Allows choice for truck to detect pedestrians, objects, or both, depending on customer preference. Your choice can maintain operational efficiency for your specific needs.



obstacles

Detects

SEnS+ does not require detection tags and is useful in an environment where pedestrians are entering and exiting the area of operation.





#### 3 - level notification

# Traveling speed and truck control

There are 3 levels at which SEnS+ will notify the operator of pedestrian and object detection. The notification signals vary with intensity depending upon the detection target, traveling speed, and steering direction.

### Signals when a pedestrian or object is in the detection range:



Area C



Area B



Area A

Traveling speed is controlled according to pedestrian and object distance.



#### Truck speed is controlled

## **Truck Speed Control**

The operator receives notification of objects behind the forklift before operation. If the operator attempts to reverse the truck with an obstacle detected, truck movement will be restricted.

#### **Backward Movement Prevention**

Signals make operator aware of obstacle



The truck display indicates the location of the detected object.



Signals intensify with proximity to obstacle Signals are issued regardless of the position of the direction lever



With a horizontal field of view of 130 degrees, maximum distance of 10 meters, and a maximum width of 5.5 meters on each side, SEnS+ can detect objects with a wide range.

Wide detection range



Signaling range

The system uses traveling speed and direction to automatically adjust the detection range, maintaining efficiency of your operation.

#### Notification range automatic adjustment Detection distance: Approximately 10 m Detection angle: 130° Approximately 5.5m on each side Area A Slow Traveling speed Medium Area B Traveling direction Straight Area C

<sup>\*</sup> SEnS+ controls the operation by applying regenerative braking. It is not a function to automatically stop a truck.