

LOCALSAFE®

Smarter Forklift Safety with Proximity Warning System

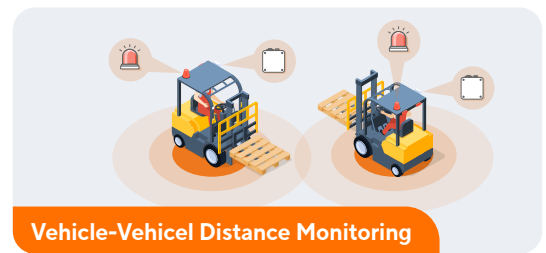
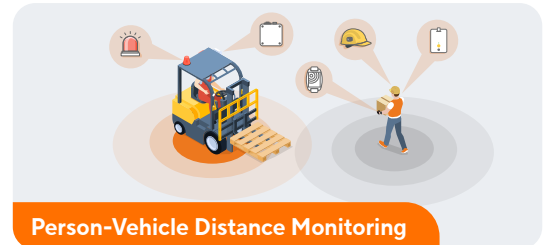
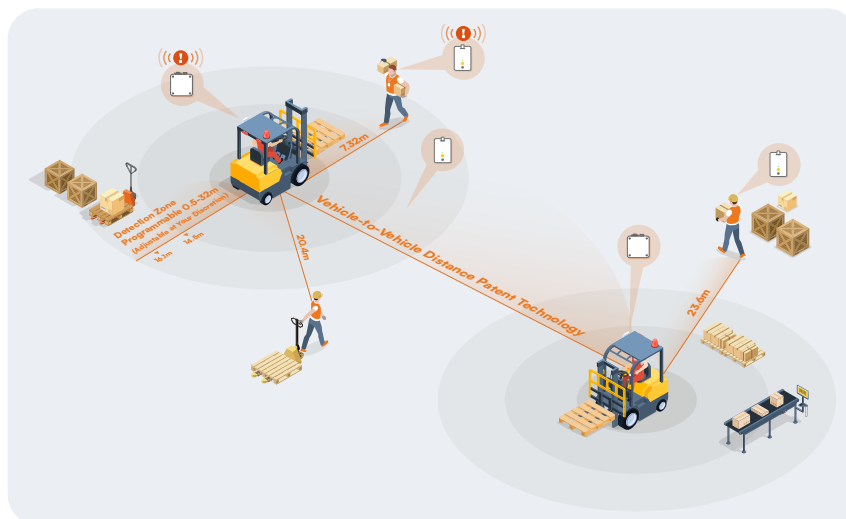
0.1m Accuracy

Person-Vehicle Distance Monitoring for Collision Avoidance

Forklifts in logistics, warehouse and factory settings often face risks from driver fatigue, blind spots, speeding, and improper maneuvers. These can lead to collisions, disrupting production, incurring heavy compensation, and legal liabilities. Thus, accurate distance - measuring warning tech is urgently needed.

Forklift Safety Reinvented SafeGuard's Accuracy Collision Prevention

Our system uses LocalSense® UWB(Ultra-wideband) wireless technology, along with LOCALSAFE anchors in vehicles and LOCALSAFE tags on people. It accurately measures real - time distances between vehicles and people, and among vehicles. With 10 cm accuracy, it provides all - around safety distance protection, ensuring safety, reducing risks, and boosting efficiency at work.



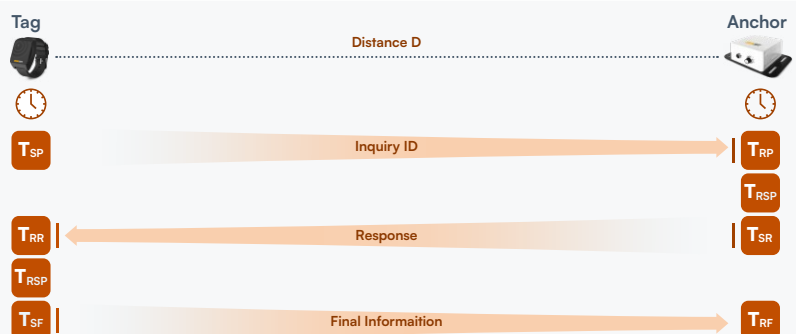
Core Technology

UWB (Ultra-wideband) uses ultra-short pulse signals across a wide, several-GHz frequency range for communication and positioning. UWB calculates distance by measuring signal Time of Flight (ToF) and telling multipath signal arrival time differences.

LOCALSAFE benefits from UWB's high -accuracy- feature. Enabled by our advanced and optimized algorithms, it achieves **0.1m accuracy** for reliable distance proximity warning applications.

TOF Ranging Principle

Tag-to-Anchor distance acquisition



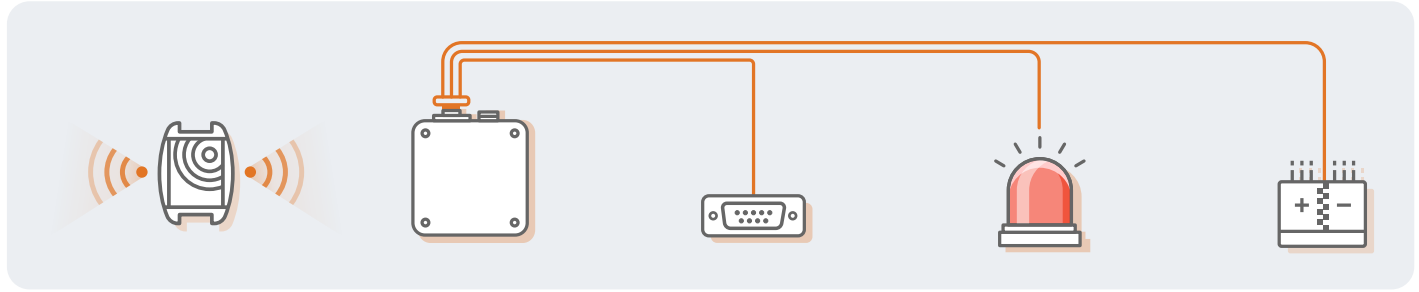
Tag and Anchor Distance

$$D = C \times \text{TOF} = \frac{(2T_{RR} - T_{SP} - 2T_{SR} + T_{RP} + T_{RF} - T_{SF})}{4}$$

The pulse speed is equal to speed of light

Brief Introduction to Using the LOCALSAFE System

The LOCALSAFE **Forklift Proximity Warning** System streamlines safety, ensuring a secure work environment effortlessly.



✓ Installation

The system is equipped with dedicated connecting wires. All you have to do is effortlessly plug them into the corresponding ports of the LOCALSAFE anchor on the vehicle and relevant equipment, and the hardware connection is complete.

✓ Quick Configuration

After powering on the device, follow the on - screen prompts. Simply set key parameters like the safety - distance threshold and alarm mode to quickly configure the system.

✓ Daily Operation

Once the staff put on the LOCALSAFE tags and the vehicle starts, the system automatically kicks in. Whenever the distance between the vehicle and personnel or between vehicles approaches or drops below the set safety threshold, the system instantly triggers an audible and visual alarm, promptly alerting relevant personnel and effectively preventing potential collision accidents.

System Features



Easy to Use



Plug and Play



Centimeter-level Accuracy



Safe and Effective

Products



Quick Configuration

- ✓ Anchor: MA2000*1
- ✓ Wristband tag: Tb1000-w*1
- ✓ Helmet tag: Tb1000-h*1
- ✓ Badge tag: Tb1000-g*1
- ✓ USB power adapter*2
- ✓ USB flash disk *1(Includes configuration software)
- ✓ Audible - visual alarm and cables*1
- ✓ Screws*4



MA2000

Power Supply: DC 24V
Working Temperature: -20 ~ 60°C
Storage Temperature: -40 ~ 85°C
Coverage Range: Max 32m

*The knob is optional



Wristband Type Tb1000-w

Battery Type: Rechargeable
Battery Life: 1 ~ 3 months
Refresh Rate: 0.1~30Hz

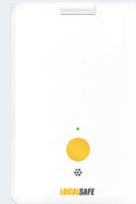
- ✓ Buzzer
- ✓ Vibration
- ✓ SOS Alarm
- ✓ RFID



Head-mounted Tb1000-h

Battery Type: Rechargeable
Battery Life: 1 ~ 3 months
Refresh Rate: 0.1~30Hz

- ✓ Buzzer
- ✓ Vibration
- ✓ SOS Alarm
- ✓ RFID

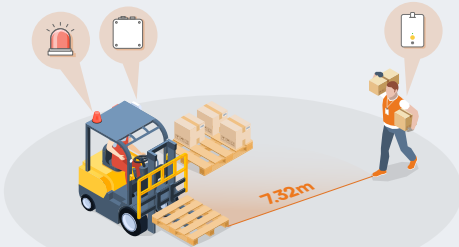


Badge Type Tb1000-g

Battery Type: Rechargeable
Battery Life: 1 ~ 3 months
Refresh Rate: 0.1~30Hz

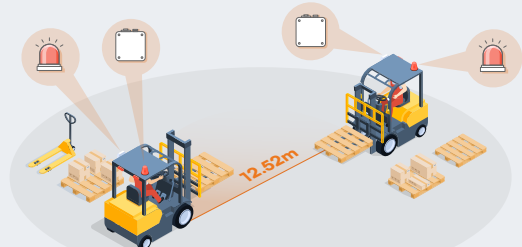
- ✓ Buzzer
- ✓ Vibration
- ✓ SOS Alarm
- ✓ RFID

Application Scenarios



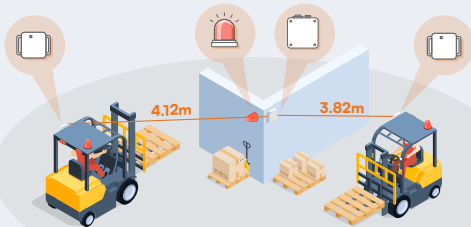
Person - Vehicle

Vehicles are equipped with an anchor and audio - visual alarm, while persons wear tags. An alarm will sound instantly when the distance between them reaches the set value.



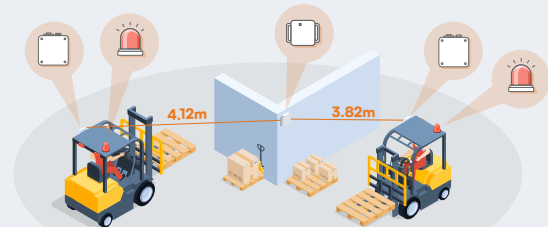
Vehicle - Vehicle

Vehicles are equipped with anchor and audible -visual alarm. Alarms will sound instantly when the distance between them reaches the set value.



Corner Collision - 1

Vehicles are fitted with LOCALSAFE® tags. LOCALSAFE® anchor and audible - visual alarm are installed at corner. When a vehicle approaches a corner, the audible - visual alarm will sound immediately.



Corner Collision - 2

LOCALSAFE® tag is installed at corner, while vehicles are equipped with LOCALSAFE® anchor and audible - visual alarm. When a vehicle approaches a corner, the audible - visual alarm will trigger immediately.

More Features Await



Multi-level Proximity Alarm

When object enters the alarm zone, the anchor connected audible and visual alarm sounds, with urgency rising as distance shrinks.



Unique ID Identification

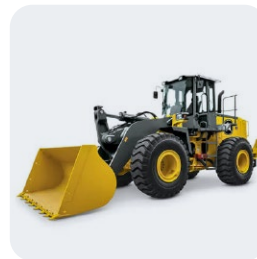
Employee - worn tags with RFID technology have unique IDs across the network and can replace ID cards for access control.



Additional Features

It can record and track approaching object, then linked to cut vehicle power with additional controller, and its tag alarm is customizable.

Beyond Forklifts: System for All Industrial Vehicles



Our Clients

Linde

HELI

JUNGHEINRICH

MANITOU
GROUP

TOYOTA

KION
GROUP

NOBLELIFT

HUBTEX

PRAMAC

CAVATION SIDeloaders
BAUMANN

Zowell Chile

GENKINGER
MATERIAL HANDLING

HYSTER

CROWN

HYUNDAI

Stöcklin
Home of Intralogistics

KOMATSU

Paletrans
EMPILHADEIRAS

SFC **HANGCHA**
AUTHORIZED DEALER

LIUGONG

This is LOCALSAFE,
which safeguards your safety with 0.1m accuracy

