Workplace Contact Tracing Detector and Social Distancing Solution

ZKTeco offers the latest Social Distancing Solution utilizing Ultra-Wideband (UWB) positioning technology and developed to prevent the spread of the new Coronavirus in industrial environment. The system has a detection range of up to 1 meter. Through precise ranging prevention, it can effectively prevent close contact between people and perform personnel contact tracking. In case any distance between each other less than 1 meter (adjustable) is detected, the tag card will automatically alert (alarm & vibrate). In addition, every alarm event will be recorded and close contact tracking can be done through contact history. The solutions is optimal for fields with gathering of people to ensure public health and safety.

Application of Workplace Contact Tracing Detector and Social Distancing Solution
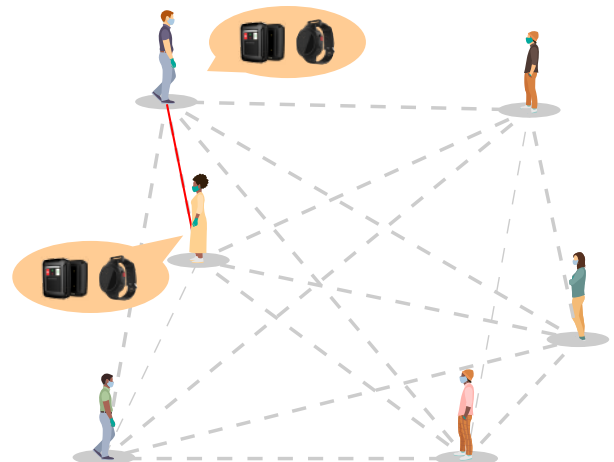

Social distancing has been regarded as one of the effective measures against the COVID-19 pandemic, as keeping a distance from others reduces droplet transmission of virus. ZKTeco is offering a health protection solution which utilizes our techniques to track people and ensure they keep distance with wrist tags and portable alarms. Once any person has a distance less than 1 metre from any other within designated area, alarm will be triggered to remind people of social distancing and will be tracked and recorded for central monitoring.

ZKTeco Touchless Biometric Solution has been widely used in many practical scenarios, from borders and immigration control to workforce management in various industries including office buildings, warehouses, factories, clinics, restaurants, and construction sites etc.
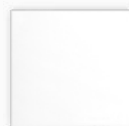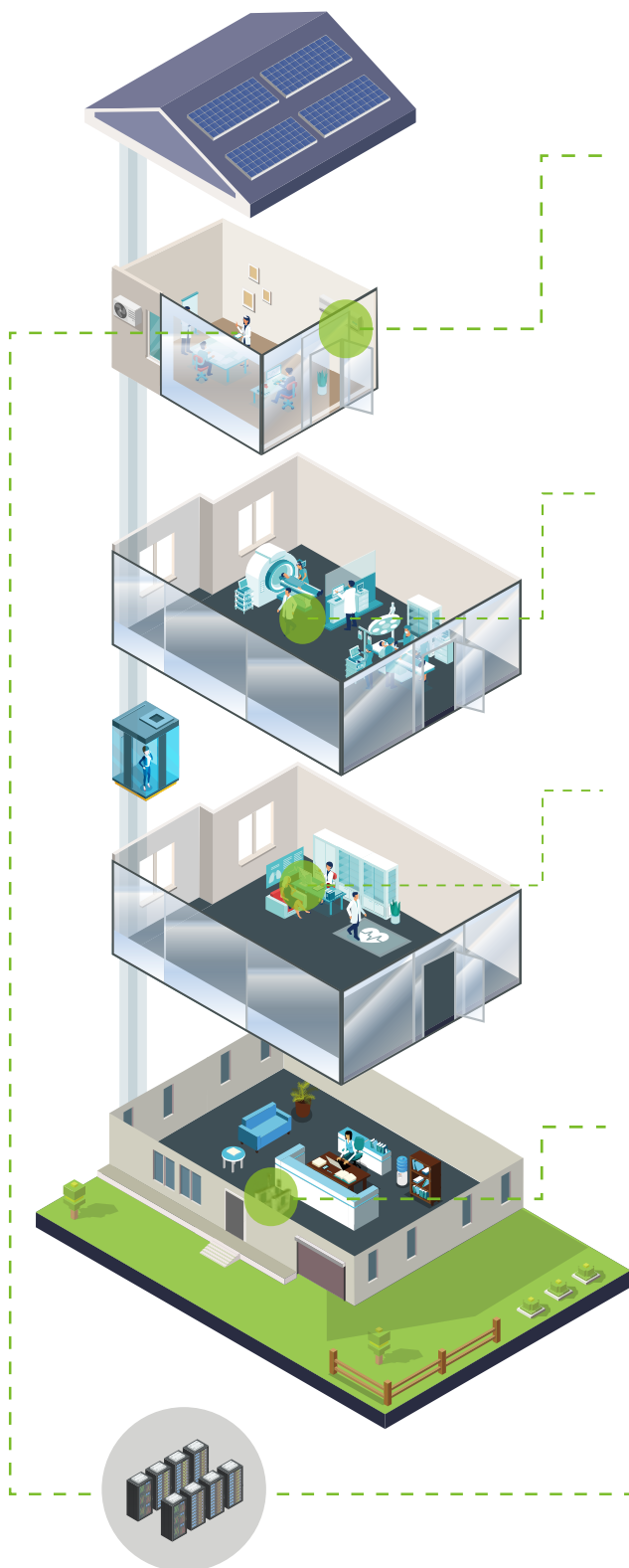
What ZKTeco Social Distance System is

ZKTeco Social Distance Alarm System is based on Ultra-Wideband (UWB) positioning technology and developed to prevent the spread of the new Coronavirus in industrial environment. The system has a detection range of up to 1 meter. Through precise ranging prevention, it can effectively prevent close contact between people and perform personnel contact tracking.

In specific applications, each worker is aligned with a ranging location tag. The social distance alarm system will measure the relative distance between each other in real time. In case any distance between each other less than 1 meter (adjustable) is detected, the tag card will automatically alert (alarm & vibrate). In addition, every alarm event will be recorded and close contact tracking can be done through contact history.

Application of social distancing solution

SS Gateway
Panel-type positioning base stations

SSW
Social Distancing Bracelet

SST
Social Safety Tag

SSB
Social Safety Badge

SS Gateway
Outdoor Positioning Base Station

UWB Software

Positioning equipment

SSW

Social Distancing Bracelet

SST

Social Safety Tag

Coming Soon

Positioning tag for helmet

Coming Soon

Tag for supply card

Positioning base station

SS Gateway

Panel-type positioning base stations

SS Gateway

Ceiling mounted positioning base station

SS Gateway

Outdoor Positioning Base Station

Coming Soon

Long-spacing outdoor positioning base station
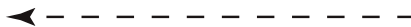
Solution: Social Distancing

With the solution, each person will wear a wrist tag and an alarm, if any distance of tags less than 1 metre is detected, the alarm will be triggered and emits signal light and vibration, and the related data will be uploaded instantly. Administrators are able to view up to 30,000 contact details and the exact distance between any two persons.

• Set certain area to limit crowd density
• Prevent unnecessary gathering

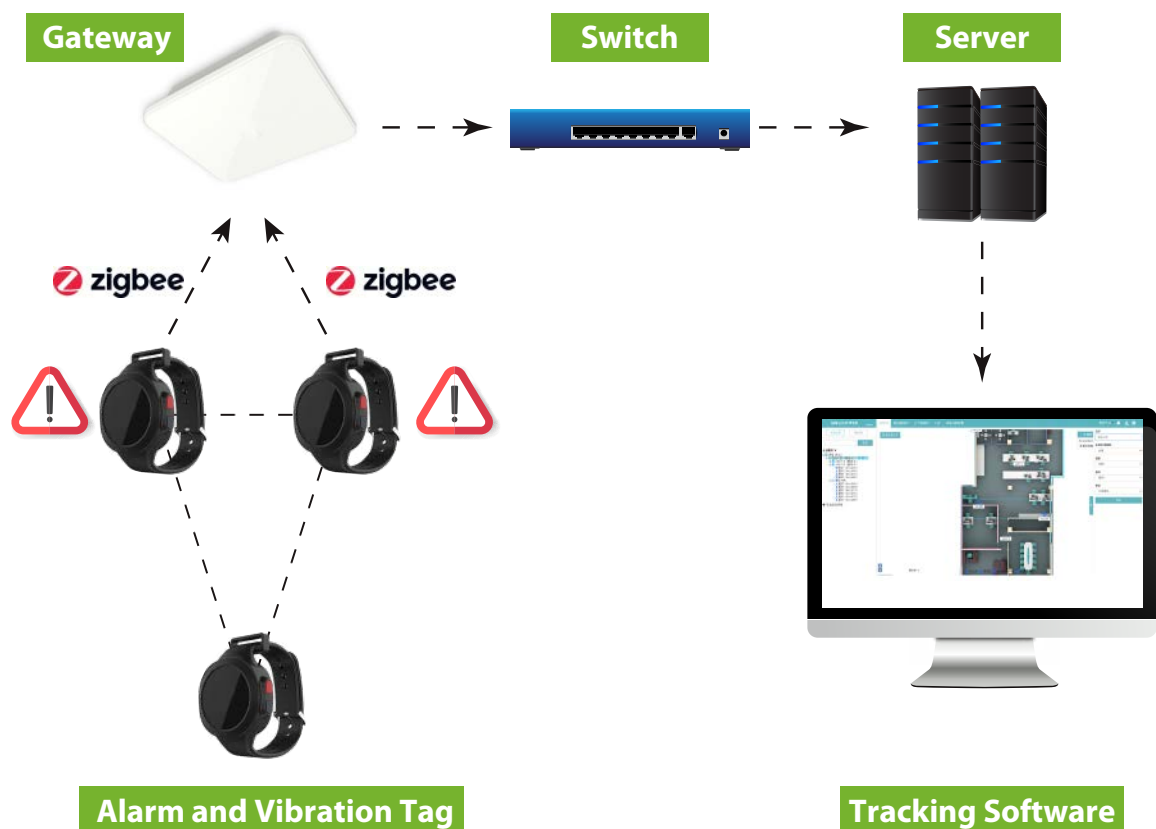**UART data transmission**

Tracking Software

Alarm and Vibration Tag

Advance Solution：Contact Tracing

ZKTeco social distancing solution utilizes Zigbee technique for preventing social distance and monitoring the exact location of people. With the ZigBee connection with gateways, it can locate and monitor location of visitors in real time, wherever people is entering or leaving the monitored location, they will be recorded.

Meanwhile, it can also improve the ability to handle social distance, each person is aligned with the location wrist tag. Once Any two tags are too close, alarm and vibration will be immediately triggered. Up to 30,000 contacts details can be viewed via computer.

- The system monitors exact location of all people
- Set certain area to limit the crowd density
- If the limit is exceeded, the system will automatically alarm
- Prevent unnecessary gathering

Gateway

Switch

Server

zigbee   zigbee

Alarm and Vibration Tag

Tracking Software

Physical Distancing Alert

In order to reduce the spread of virus, retailers and enterprises are recommended to create an environment that which maintains social distancing regulations between people for safety of employees.

Our sensors utilizes the latest physical distancing function that enables measurement of distance between people in real time, it helps to comply with protective measures. The solution is optimal for applications with people gathering, for instance lining up.

Stay Overtime Alert

ZKTeco social distancing solution enables real time tracking of the numbers of leaving and overstaying employees in a certain area. Overtime alarm can be set by doctor, nurse or patient, if anyone overstays in the monitored location, user can also be notified and alerted.
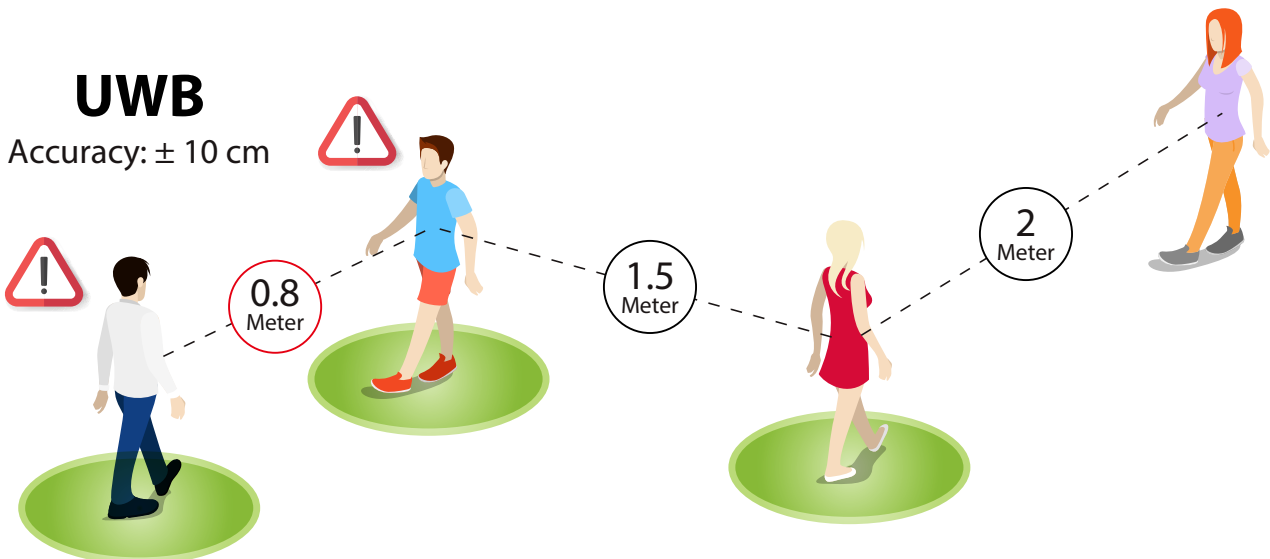
Overtime Alert

UWB Enhances Accuracy

ZKTeco utilizes UWB (Ultra-wide band) technology for indoor positioning for higher accuracy (± 10 cm) than Bluetooth. It enhances location monitoring efficiency with its precise reading, thus it can be functioned as social distancing and contact tracing that is more accurate and reliable for social distancing.
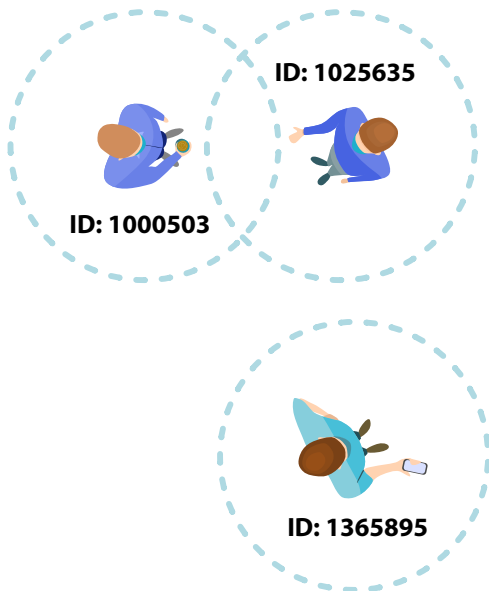
UWB
Accuracy: ± 10 cm

0.8 Meter

1.5 Meter

2 Meter

Tracking Record by Software

ZKTeco's tracking software enables administrators to record time spent of users in the monitored area. It binds user's ID and provides heat map analysis and tracking report for better infection control of the new Coronavirus in an industrial environment.

Binds user's ID

ZKTeco's tracking software enables admin to bind tag IDs with information, for example, patient can be bound with their patient number in order to make sure they have sufficient social distance.

Heat map analysis

The solution provides heat map analysis, graphically representing the monitored location with different colours (red, orange, yellow). The hotness indicates how long customers stay; how many customers pass through those areas and indicate the spending time of user on looking at those products and are more engaged.

ID: 1025635

ID: 1000503

ID: 1365895

Tracking report

Software enables user to configure alarm signal and get tracking report that administrator can find close contact information, contact duration and contact time.

If one of your patients is tested positive for COVID-19, our tracing report would be a good way to let administrators quickly and accurately determine the level of exposure and seek out the potential risk of other patients, so they can notify them and take corresponding action.

ZKTeco offers a wide range of high-quality products that meet the needs of global customers, from facial recognition to palm recognition module that all can be integrate with other devices.

With an emphasis on quality, technology, and cost-effectiveness, ZKTeco seeks to offer the best solution in a wide range of dimensions.

Products Features

SSW
Social Distancing Bracelet

Working Hours: 20+h (Chargeable)
Primary:
1. Ranging Error: 10cm
2. IP67
3. Operating temperature: -20~60℃

52×52×20mm/85g
52mm   20mm

SST
Social Safety Tag

Working Hours: 20+h (Chargeable)
Primary:
1. Ranging Error: 10cm
2. IP67
3. Operating temperature: -20~60℃

78×60×21mm/75g
78mm
60mm   21mm

SSB
Social Safety Badge

Working Hours: 14h (Chargeable)
Primary:
1. Ranging Error: 10cm
2. IP67
3. Operating temperature: -20~60℃

工作证
WORK PERMIT

姓名/ Name
卡号/Number
联系/Position

85x56x6mm/35g
85mm
6mm   56mm

ZKTeco Products Applications

ZKTeco's social distance solution is a good fit for this situation that is preventing people or patients from touching the door handle. The solution has been widely used in many practical scenarios, including hospitals, educational institutes, factories, construction sites, shopping malls, IT parks, public transportation, banks, business organizations, small to medium enterprises, government organizations and so on.

Hospitals

Educational Institutes

Factories

Construction Sites

Shopping Malls

IT Parks

Public Transportation

Business Organizations

Small to Medium Enterprises

Banks

Government Organizations

ZKTECO CO.,LTD.   www.zkteco.com   E-mail: sales@zkteco.com   CE FC