

4D RADAR TECHNOLOGY

Our WarmSense™ Contactless Fall Detection and Vital Sign Monitoring Sensors. Cutting Edge Technology applied to Senior Living.

Our WarmSense™ Fall Detection sensor works with a powerful and unique chip which creates hyper accurate, high-resolution, point-cloud images of any activity within a 350Sq.Ft room. This is created in real time based upon advanced 'Radio Frequency' technology. The created images are then interpreted instantaneously by advanced algorithms to detect abnormal situations within the room.

The sensor is capable of detecting a vast array of falls which can be categorized as fast falls, gradual falls, falls behind objects and furniture, or even falling from a bed. It can further determine positional falls such as falling on the back, side, or stomach. It is mindful of privacy because it does not use cameras, listening devices or wearables. Our sensor has gone through extensive tests across 17 different fall scenarios and achieved industry leading detection rates.

Additionally, our sensor allows us to create multiple zones within a room which affords the consumer the ability to monitor various activity levels of their loved ones. It is able to observe a variety of events such as time spent sleeping, sedentary time passed on a couch, or activity levels in the kitchen or bathroom. These calculations allow the supervisor the ability to monitor trends and notice any changes in the lifestyle patterns of their loved ones. Even the slightest changes in patterns can be reliable predictors of possible health and life-style risks.



● Traditional Fall Detections Devices Vs WarmSense™ 4D Radar Technology

Falling is far more dangerous for seniors than it is for younger people. This is because older adults are at a much higher risk of injury. Older adults are more susceptible to osteoporosis, which can make their bones brittle and likely to break. Falls can also cause serious head injuries or in extreme cases, even death.

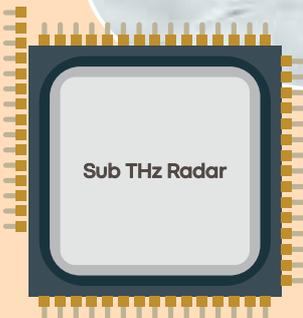


Traditional Fall Detection pendants, that require you to manually press an alert button, have been the most common form of “fall detection” for several decades. In essence, these devices do not actually detect a fall and they require manual operation from a conscious subject. It is apparent that one of the biggest downsides of using a traditional pendant is that there is a stigma that comes with wearing one. Many seniors do not want to alert others to the fact that they are scared of falling or are at a higher risk of injury. Even if the person does not lose consciousness following a fall, an injury may still prevent them from activating the alert button. Additionally, pendants only track falls after they happen – they do not provide any prevention technology.

WarmSense™ Sensors not only detect falls, they measure activity levels and daily patterns of your loved ones. From measuring time spent in bed, nocturnal roaming, bathroom visits, or decreased activity, we can provide early indicators of sleep deprivation, fatigue, or other negative health symptoms which can alert you in advance to possible negative outcomes.

● Introducing WarmSense™ Health

Our WarmSense™ Health Sensor is currently in Beta Testing with some of the most prestigious Healthcare institutions in the country and will be available for release in Q1 2021. The sensor is a fully functioning, self-contained compact system (6x8 cm) based on two disruptive technologies: proprietary algorithms (that enable tracking of vital signs when a person is in motion) and a digital SMD micro-radar (sub-THz). Our motion compensation algorithms uniquely deliver full functionality in real-world, vibration-rich environments. This hardware and software enables us to provide monitoring of a person’s vital signs in previously unimaginable ways.



The sensor will provide 4 key metrics:

Heart rate



Heart rate Interval
/ Variability



Respiration Rate



Respiration Amplitude



Moving forward, additional metrics will be released to the market.

