McKare

Heart Rate

Respiration Rate

Movement Detection

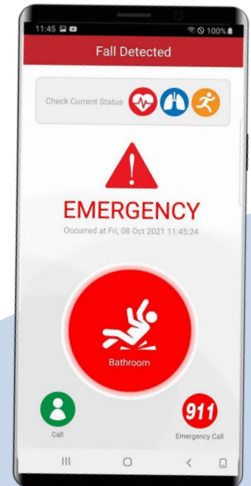Fall Detection

Stress Relief of Staff

Contactless
Vital Sign Monitoring

McKare

Continuous Health Monitoring Service

- Simultaneous measurement of multiple vital signs (eg. heart rate, respiration rate, movement, fall)

- Available on Wi-Fi scope covering the area

- Customized healthcare service (Device + Platform)

Stress Relief of Staff
Sensor support to prevent and minimize potential risks

Unconstrained & Privacy Protection
Non-identified on-site health monitoring without cameras or recording devices

Individualized Care Service
User's vital sign analysis and abnormalities supported by the A.I. algorithm engine

Convenient Installation and Portability
24/7 health monitoring with convenient installation

Contactless Remote Monitoring
Remote Wireless Care Service without inconvenience in wearing between service staff

McKare

Contactless

Vital Sign Monitoring

2)

Real-Time Monitoring

1)

3)

4)

1) Radar Sensor
- Measuring and transferring Biosignal data
- Heart rate / Respiratory rate /
  Body temperature
- Movement / Occupancy / Fall

2) Wireless Gateway (AP)

3) Cloud Server
- Judgement Algorithm (Software)
- A.I. Judgement Cloud Server System

4) Platform
- Automatic emergency alarm transmission
- Between the user and registered guardians

McKare

Wall / Ceiling / Furniture installation radar sensor

- Monitors the user's heart rate and respiratory rate at a distance up to 2m and 5m, respectively
- Connected to gateway using IoT network solutions such as Wi-Fi and Zigbee

Sensor Technology	Micro Doppler Processing
Frequency	24GHz (24.050 ~ 24.250)
Coverage Angle	Horizontal: 80°, Vertical: 35°
Coverage Distance	1~5m (Heart: 2m, Respiratory: 5m, Movement: 7m)
Supply Power	DC 9V
Power Consumption	300mA
Interface	Wi-Fi, Zigbee (USB to UART / optional)

Technical features of product

Hardware technology

- Multi-path processing circuit for complex radar reception signals
- mmWave module circuit & mechanical housing design

Signal processing technology

- Micro-doppler signal processing technology
- Algorithm for applying a weighting competition

Software technology (signal analysis)

- Algorithm for health & sleep pattern analysis software
- Algorithm for emergency pattern judgement
- Dashboard GUI software design