



Smart IoT Fall Detection Appliance

As China and Hong Kong moves into an aging society, the demand for elderly care is growing rapidly. Aging at home allows seniors to enjoy their golden years in familiar surroundings, without the need to adjust to new environments or strict routines of nursing homes. It ensures autonomy while giving families peace of mind. However, health emergencies, especially for those living alone or during the night, pose significant risks. This is particularly concerning when no immediate help is available in case of accidents. For Hong Kong seniors choosing to retire in Guangdong, the lower living costs and spacious housing are attractive, but the distance from family emphasizes the need for 24/7 safety monitoring.

Evertch Electronics Limited understands the needs of seniors across Hong Kong and China. We have developed a one-stop AIoT (Artificial Intelligence of Things) solution for home-based elderly care, launching two advanced smart devices that offer round-the-clock protection.

These devices utilize cutting-edge millimeter-wave (mm Wave) technology to monitor breathing, heart rate, sleep quality, and movement without physical contact. They detect falls or irregularities in real-time, instantly alerting family members or emergency services to ensure timely assistance.

The devices are compact, easy to install, and equipped with built-in data SIM cards for internet access and calls, requiring no complex setup. The mm Wave technology operates at ultra-low power—safer than neighboring Wi-Fi signals—eliminating the discomfort of traditional wearable like heart rate bands or wrist monitors. Whether in the bedroom, living room, or bathroom, these devices provide complete coverage to safeguard the elderly's health and safety.

MEGAsys ISMS - Full Function Control for Disable Toilet IoT Control:

Usage Status: (Digital Input)

- 1) IoT Control Panel Tamper Status
- 2) Toilet Lock Status (Lock or Unlock)
- 3) Key Status
- 4) Door Override Status
- 5) Toilet Door Status (Close/Open)
- 6) Panic alarm status
- 7) Water leakage, Smell Monitoring etc...

By Radar Sensor: (Analogue Detection)

- 1) Angle Normal (Radar Sensor Normal/Tamper)
- 2) Person Detected (Person Occupied)
- 3) Fall Detection (People fall down first 10 second – prealarm)
- 4) Fall Confirmed (People fall down over 50 second – programmable)
- 5) People Count (How many people inside toilet, 1-4 person)

Remote Control Override Function (Digital Output Control)

- 1) Remote Locate Buzzer and Light Control On/Off
- 2) Remote Lock Override Open

The screenshot displays a web-based control interface for the MEGAsys ISMS. It features a 'Control' section with checkboxes for 'Buzzer Light', 'Lock Control', and 'Occupants', along with a 'Send' button. Below this is the 'Controller Status' section, which shows the current date and time as '2025/05/28 15:21:01'. It includes an 'Input' section with checkboxes for 'Panel Status', 'Door Status', 'Key Status', 'Door Open Override', 'Lock Status', 'Spare #1', 'Spare #2', and 'Spare #3'. The 'Radar' section has a 'Reset' button and checkboxes for 'Angle Normal', 'Fast DetetMode', 'Auto Call Mode', 'Person Detected', 'Fall Detected', 'Fall Confirmed', 'onBoard', and 'PersonCount'. The 'Status' is currently 'Normal', and there are buttons for 'Upload to Server' and 'Request Status'.



Fall Detection Alarm System

Protect Every Step with Milliwave Fall Detection

As Manager of large commercial properties, ensuring occupant safety is paramount. Our Milliwave Fall Detection System offers real-time alerts for falls, enabling immediate assistance and reducing injury risks.

Key Benefits:

- ✓ **Instant Alerts:** Detects falls promptly for fast responses.
- 🛡️ **Privacy-Focused Monitoring:** Non-invasive, discreet, and continuous observation.
- 👴 **Elderly Protection:** Enhanced safety for senior occupants.
- 🔗 **Seamless Integration:** Works with existing property management systems.
- 📱 **Custom Notifications:** Real-time alerts via SMS, email, or system integration.

Invest in advanced safety solutions to enhance property value and occupant trust. Ready to enhance safety? Let's tailor the MW FallShield System for your properties today!

Every Fall Detected. Every Life Protected™



24/7 Real-Time Monitoring



Milliwave 60GHz Technology



Enhanced Safety & Improved Care



User Friendly Interface

Real-Time Fall Detection

Instantly detects falls and alerts caregivers, reducing risks of prolonged immobility and uncovering hidden incidents.

Human Presence Tracking

Monitors room occupancy and rest patterns, tracking bathroom usage and frequency to identify potential health concerns.

Out-of-Bed Alerts

Notifies caregivers when high-risk residents sit up or leave the bed, reducing the chance of falls.

Contact-Free Monitoring

Fully automated, no need for pull cords or manual alarms, ensuring seamless protection without regular maintenance.

Input Voltage	AC 100V-240V
Operating Voltage	DC12V
Operating Current	2A
Positioning chip	Built-in high sensitivity System-On-Chip
Detection Range	<10m Coverage: 16m ²
Installation Type	1.5m wall-mount / ceiling mount / tilt
Communication	4G Network Supports Two-Way Calls
Alerts	App and platform notifications
Effective Range	1.5m wall-mount Coverage of 16m ²
Detection Time	7*24 non-stop
Max. range body detection	5m
Max. range body in motion	3m
Max. range voice call	3m
Communication Frequency	FDD-LTE TDD-LTE
Detection	mmWave Radar, 60GHz, 4D Imaging
Resistance of noise	Detection resistance to illumination, moist and/or smoke
Field of View	4 x 4m Angle of View 150°
Features	Fall detection, human presence tracking
Wireless LAN	2.4GHz WiFi (802.11 b/g/n)
Operating humidity	95% max.