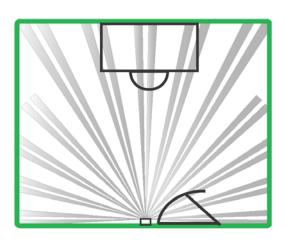# OSSMT Application Notes

The OSSMT combines Multi-Technology with all-digital architecture to minimize false triggering. The Passive Infrared (PIR) technology is used to turn lights ON and the Ultrasonic (US) technology and the PIR are used to keep the lights ON reducing false triggering from adjoining hallways or active spaces. Because of this design, the US sensitivity can be set higher to detect small motions such as typing or motions out of direct line-of-sight of the sensor as found in restrooms with partitions.

Traditional PIR wall box mounted sensors can be limited in effectiveness in some applications due to lower mounting heights and line-of-sight obstructions. The OSSMT Sensor with Multi-Technology works well in spaces such as private offices, small open offices, restrooms, hallways, conference and meeting rooms, and storage areas where the switch location does not permit direct line-of-sight. Additionally, the OSSMT is an alternative where the labor required to remotely install multi-technology sensors makes the installation cost prohibitive. PIR sensors are still appropriate for use in areas with an unobstructed view of the sensor, and the fine motion coverage is within the sensor's range.

The OSSMT digital architecture "learns" the patterns of occupancy and adapts by looking at the type of motion (small or large) and makes adjustments to better refine how the signal is interpreted. Constant movement (such as air flow from the HVAC system) is filtered out, preventing the lights from staying ON without occupancy.

Below are two common space applications:

**Private Office with Occupant's
Back to Sensor**

Restroom with Partitions