## WSK-24 Wireless Occupancy Solution

### APPLICATION

The WSK-24 Wireless Occupancy Solution automatically controls HVAC equipment by determining when a room is occupied. The WSK-24 uses the combination of an occupancy sensor and a door switch to provide optimal control. The WSK-24 is packaged in a kit that includes the following components:

- One 24V dry contact receiver
- One wireless PIR (passive infrared receiver) occupancy sensor with mounting kit
- One wireless door sensor with mounting kit
- One wiring harness.

The receiver can be wired into any thermostat or controller that supports the connection of a remote setback device. The receiver communicates wirelessly to a PIR occupancy sensor, a door sensor, and an optional 2nd door/window sensor. After the receiver determines that the room is unoccupied, it closes a dry contact switch. After the thermostat or controller recognizes the contact closure, it places the thermostat in economy setback mode, which provides energy savings for when the room is unoccupied.

### SPECIFICATION DATA

#### FEATURES

- Wireless system provides quick and easy installation
- Pre-configured door sensor and occupancy sensor
- Guest comfort is maintained by never turning off HVAC equipment when someone is in the room – even if they are sleeping
- Fuse protection
- Long battery life
- Low battery indication
- Receiver memory retained after power loss
- Optional sliding door/window sensor can be easily added
- Compatible with T7350 and T7351 (WSK-24 has a N/O relay and T7350/T7351 assume that the dry contact inputs are N/C. Therefore, a Honeywell R8222 low voltage switching relay [N/C] needs to be used to reverse the logic of the dry contact input into the thermostat. R8222B1067 [24VAC, SPDT] and R8222N1011 [24VAC, DPDT, Pilot Duty] are available.)
SPECIFICATIONS

Operating Temperature:
- **Receiver:** -21 to 60°C (-5 to 140°F)
- **Door Sensor**: -20 to 60°C (-4 to 140°F)
- **PIR Sensor**: -20 to 40°C (-4 to 104°F)

Power Supply:
- **Receiver:** 24 Vac/Vdc at 50/60 Hz; Standby power consumption 15 mA; Channel 1 relay output, N.O.
- **Door Sensor:** Two CR2032 lithium batteries
- **PIR Sensor:** Three AAA E92 1.5V alkaline batteries

Battery Life:
- **Door Sensor**: Two years (under normal usage)
- **PIR Sensor**: One year (under normal usage)

Receiver Operating Frequency:
- **Receiver:** 433.92 MHz
- **Door Sensor**: 433.92 MHz
- **PIR Sensor:** 433.92 MHz

Receiver Frequency Range:
- With antenna exposed:
  - Open Range: 200 ft.
  - Typical Range: 100 ft.
- With antenna coiled inside receiver:
  - Open Range: 50 ft.
  - Typical Range: 40 ft.

PIR Detection Pattern:
- **Length:** 3 to 8 meters when mounted 2 meters above the floor (see Fig. 1)
- **Angle:** 140 degrees (see Fig. 2)

- and 50037735-001, the optional sliding door/window sensor

Fig. 1. Side view of PIR detection pattern.

Fig. 2. Top view of PIR detection pattern.

Dimensions:
- **Door Sensor**: 1.4 x 2.3 x 0.6 in (35.8 x 57.6 x 15.2 mm)
- **Receiver**: 3.6 x 3.4 x 1.2 in (91.4 x 86.4 x 30.5 mm)
- **PIR Sensor**: 2.8 x 3.9 x 1.1 in (71 x 100 x 28 mm)

Approvals: FCC Part 15 Class B

Accessories:
- 50037735-001: Optional Sliding Door/Window Sensor

Replacement Parts:
- 50037737-001: Wireless Receiver
- 50037736-001: Wireless PIR Occupancy Sensor
Fig. 3. Receiver Dimensions

Fig. 4. PIR Motion Sensor Dimensions

Fig. 5. Door Sensor Dimensions