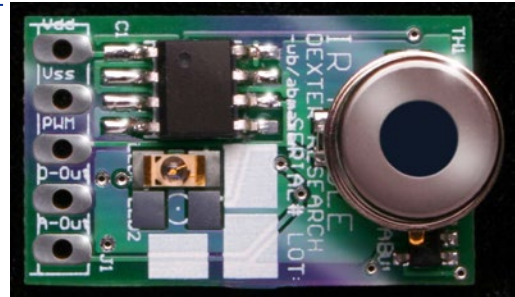


Motion Detector – Presence Sensor

Applications

Facilitates fast R&D startup time that can be integrated into your prototypes or final system design.

- “Smart Washrooms” automatic water actuation
- “Smart Home” for lighting, ambiance
- Energy Conservation, HVAC & lighting control for hotel rooms
- Presence sensing for security, convenience
- Safety Curtain, Industrial Monitoring
- Human Detection for Safety and Security
- Remote Monitor of elderly patients
- Temperature Control module & trigger and many more...



Motion Sensing Presence Sensor, PCB size 0.70x 1.00 (shown 2x actual size)

Overview

Designed for “smart washrooms”, “smart homes” and other “smart” applications, the Motion Sensing – Presence Sensor from Dexter Research Center is targeted for high volume, cost sensitive, drop in applications, where the system designer is interested in a fully functional subsystem, with minimum cost and integration effort. The passive infrared sensor forms the heart of the system, which requires little power to operate and meets or exceeds all industry standard measures for quality and consistency including ISO, RoHS, QS, CE, UL, among others.

Internal thresholds can be utilized for flexible operation, including variable samples, triggers, distances, time delays, and alarm outputs. The three output lines provide PWM, trigger, and analog detector output allowing ease of system integration. The Motion Sensing – Presence Sensor features wide power supply tolerances, is designed for two (2) AAA battery operation, and can operate below 2.0V_{dd}. Optimized for extended battery life, the module consumes approximately 8pA when in sleep mode, thus providing long interval service cycles.

Please contact Dexter Research Center today for additional information including volume orders and delivery schedules. The heart of “smart” only from Dexter Research.

Highlights

- Fully Integrated Design
- “Drop In” form factor
- Small Footprint (1”x 0.8”)
- Battery Powered (low power, passive IR sensor)
- Multiple Outputs (analog, digital, buffered)
- Easily Reconfigured (trigger, alarm, and duration levels)
- Low Part Count Module
- Numerous Optional Features (optics, LED, wireless, etc.)
- High Volume Production Target with High Quality and Reliability

Absolute Maximum Ratings

V_{dd} with respect to V_{ss}: -0.3V to +6.5V
 Lead temperature soldering, 60 sec max:..... 300°C
 Storage temperature:..... -40°C to +125°C
 Operating temperature:..... -40°C to +125°C