NOVELIC

PRESENCE DETECTION DONE RIGHT

mmWave radar sensors:
a reliable and affordable
alternative to PIR detectors

Outstanding Motion and Presence Sensing | Fully Invisible Integration

Precise Detection Area Customization | Anonymous | Easy Setup
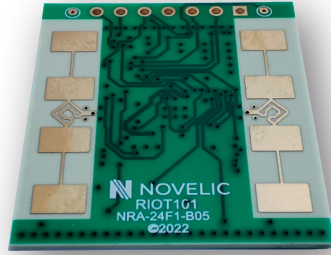
LIGHTING CONTROL

AUTOMATIC DOORS

SECURITY SYSTEMS

EQUIPMENT ACTIVATION

Fully integrated radar motion and presence detector

RIOT 100

- Reliable micromovement presence detection
- Completely invisible integration
- Precise distance sensing
- Indoor and outdoor operation

KEY FEATURES

- Senses human motion up to 20 m
- Determines movement direction
- Simultaneously detects multiple targets
- Lists all detected targets
- Serial communication interfaces
- Digital I/O event trigger interface
- No external data processing required
- Extended temperature range ideal for integration into luminaires

TECHNICAL BRIEF

	Min	Typ	Max	Units
Power Supply				
Supply Voltage		3.3		V
Supply Current		75		mA
Application Parameters				
Field of View		120x75		°
Detection Distance		15	20	m
Detectable Object Speed	0.1		10	m/s
	0.3		36	km/h
Measurement Update Rate		128		ms
Operating Temperature	-40		+85	°C

Advantages of mmWave radar sensors

ULTRA-SENSITIVE TO MOVEMENT

Detects human micromovement, whether people are moving or standing still.

MAXIMIZES ENERGY SAVINGS

Turns the lights/equipment off as soon as the room is empty. No need to set a turn-off timer and waste energy until the time passes.

SEAMLESS INTEGRATION

Works flawlessly behind materials like glass, plastics, wood, ceramics. Installs invisibly in your interior. Vandal-proof and hard to disable in security breach attempts.

360-DEGREE FIELD OF VIEW

Enables detection from 120-degree up to 360-degree for ceiling mounting setups.

ROBUSTNESS

For both indoor and outdoor use. Operates in all weather, all lighting conditions, and extreme temperatures.

WIDE CUSTOM DETECTION RANGE

Customizable detection range up to 20 meters. Every movement out of range will be ignored.

MULTIPLE TARGET DETECTION

Detects motion and presence, shows movement direction and speed, simultaneously detects and tracks multiple targets.

CROSS-TRAFFIC CANCELLATION

Provides information on target distance, direction, and speed that lets you recognize motion patterns to cancel out cross-traffic or switch appliances off/on.

INTERNAL SIGNAL PROCESSING

No radar knowledge required, no need for an external unit, all data is processed internally.

PRIVACY PROTECTION

Full privacy protection, ideal for for security applications or to preserve privacy in areas where cameras are not an option.