NOVELIC

ZORM 60 GHZ RADAR

Industrial Safety Radar

Outstanding detection performance in harsh industrial environments

DETECTION CAPABILITIES

- Human / object tracking
- Distance
- Angle of Arrival
- Velocity

ROBOTICS

AUTONOMOUS VEHICLES

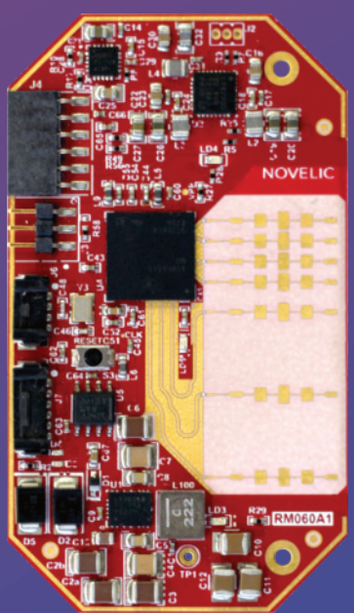
SAFETY ZONES

SECURITY SYSTEMS

GATES, BARRIERS, DOORS

THE FIRST CHOICE
FOR TOUGH ENVIRONMENTS

PRECIPITATION | OIL AND DIRT | EXTREME TEMPERATURES | LIGHT INTERFERENCE | FOG AND DUST



*Unique! A **SIL 2, PLd, Category 3 Safety system** using a single-channel architecture for radar sensors*

APPLICATION PARAMETERS

	min	typ	max
Azimuth field of view[1]		100°	
Vertical field of view[1]		30°	
Detection distance[1]	0.20 m		12 m
Position accuracy		0.02 m	
Target speed	0 m/s		7 m/s
Reaction time		< 100ms	
Operating temperature	-40 °C		85 °C
Supply voltage		12/48 V	
Communication		CAN via CANOpen Safety	

*[1] Based on reference target - a corner reflector 0.17m² (according to **IEC 61496-5**)*

KEY SYSTEM FEATURES

- Volumetric detection
- Exact position of people and objects
- Filtering out non-living stationary objects
- Precisely definable area of interest
- Reliable performance in dust, fog & dirt
- Fully temperature-independent
- Protecting privacy
- Maintenance-free, easy installation

ADVANTAGES OF MMWAVE RADAR SENSORS

Volumetric detection

mmWave radar sensors have a larger volumetric detection area in comparison to 2D laser sensors.

Temperature-independent

Radar sensors transmit radio waves for the detection of objects. This technology is fully independent of ambient temperatures and object temperatures.

Robustness

Radar sensors can operate in harsh industrial environments. They remain robust in spite of dust, dirt, fog, rain, snow, or ambient light. In contrast to laser sensors, color absorbing objects can be easily detected.

Filtering out stationary objects

Radar sensors can detect humans in zones with a number of objects, even metal ones, such as machines.

Sensitivity

mmWave radar sensors can detect and differentiate multiple stationary and moving objects around the sensor.

Affordability

For similar types of applications and comparable performance, mmWave radar sensors are more price-competitive in comparison to other sensor technologies.

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