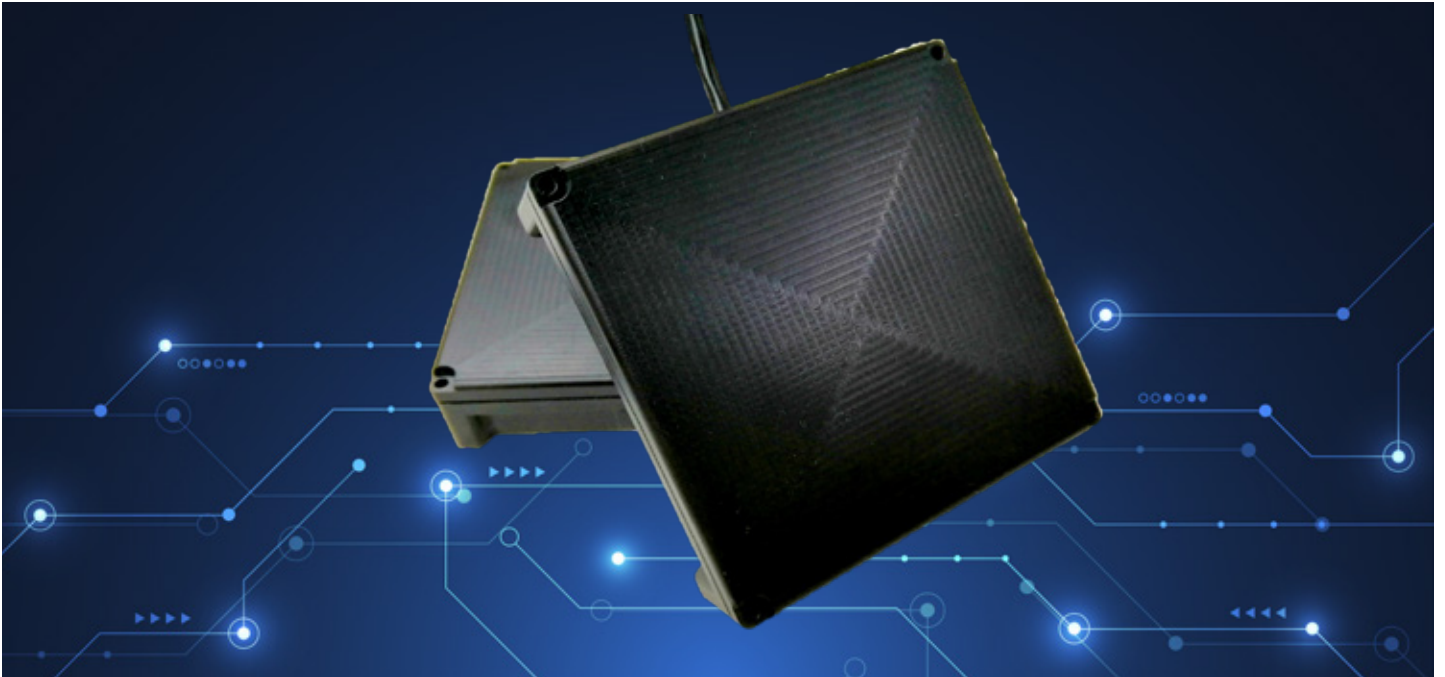


EG 261



K-band Obstacle Detection Radar

EG261 is a K-band, Frequency Modulated Continuous Wave (FMCW) based obstacle detection radar. It is designed and optimized for low power, compact and lightweight obstacle detection applications such as collision warning and detection.

Through our proprietary signal processing algorithms, the EG261 provides distance and bearing information of multiple targets within its field of view via a UART/CAN interface.

Key Applications

- Aerial Drones
- Autonomous Vehicles/Robots
- Industrial Machines

Key Features

- All-weather performance
- Multi-target detection
- Detect moving and stationary objects
- Simultaneous distance and bearing information
- Compact and lightweight
- Low power consumption
- UART/CAN interface

Connector Pin-out

| PIN | DESCRIPTION | FUNCTIONS |
|-----|-----------------|--------------------------|
| 1 | V _{cc} | +5V to +12V |
| 2 | Ground | Power supply ground |
| 3,4 | RxD, TxD | UART interface option |
| 3,4 | CAN_H, CAN_L | CAN bus interface option |

Technical Specifications

| PARAMETER | REMARKS | MIN | TYP | MAX |
|--|---------------|-------|------------------|-------|
| SENSOR PERFORMANCE | | | | |
| Transmitting Frequency (GHz) | | 24.00 | | 24.25 |
| Transmitter Output Power (dBm) | | | 20 | |
| Operating Range (m) | | 0.8 | | 50 |
| Range Accuracy (m) | | | 0.3 | |
| Range Resolution (m) | | | 0.6 | |
| No. of Simultaneous Detectable Targets | | | | 20 |
| Field of View (°) | X/Y | | 70/24 | |
| Side-Lobe Level (dBc) | X/Y | | -20 | |
| Update Rate (Hz) | | | | 80 |
| IF-AMPLIFIER | | | | |
| Gain (dB) | Fixed | | 76 | |
| Bandwidth (KHz) | | | 1-100 | |
| INTERFACES | | | | |
| Supported Interface | EG261-0 | | UART | |
| | EG261-1 | | CAN-BUS | |
| Supported Connector | | | 5 Pin GPIO/JST | |
| MECHANICAL | | | | |
| Dimensions (mm) | | | 64.0 × 64.0 × 16 | |
| Weight (g) | Without cable | | 40 | |
| Ingress Protection | | | IP55 | |
| GENERAL | | | | |
| Supply Voltage, V _{IN} (V _{DC}) | | 5 | | 12 |
| Current Consumption (mA) | | | 250 | |
| Operating Temperature (°C) | | -20 | | 60 |

Unless noted otherwise, the specifications are measured at ambient temperature of +25°C

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