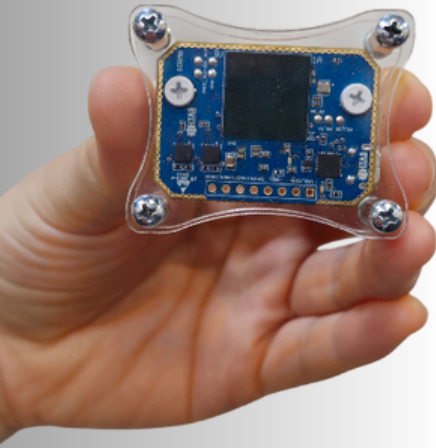


ITAS ULTRA SHORT RANGE RADAR



PRODUCT DETAILS

This technical sheet provides essential information about a short-range radar operating in the 60 GHz frequency band. The radar uses FMCW (Frequency Modulated Continuous Wave) signals combined with a MIMO (Multiple Input Multiple Output) antenna architecture, enabling simultaneous detection of multiple targets based on distance, speed, and angle. In addition, this radar can detect a person's heart rate and respiratory rate. With machine learning integration, it has the capability to perform classification (such as adult, child, animal, object, etc.).

Technical Specifications

Working Frequency

60–64 GHz

Field of View

Horizontal ± 60

Vertical ± 60

Azimuth Angular Resolution

29 deg

Elevation Angular Resolution

29 deg

Range

Up to 8 meter

Interfaces

2 x CAN FD Module

Size

35 x 45 x 15 mm with Housing

Power Consumption

<3W

Power Supply

5V

Ambient Temperature

-40...+125

KEY FEATURES

- *FMCW Radar Enables High-resolution Detection Without Physical Contact*
- *Classification Using Machine Learning Methods*
- *Easy Integration With Other Devices*
- *High Angular Accuracy Achieved Through Multiple Input Multiple Output (MIMO) Antenna Technology*
- *Real-time Monitoring of Vital Signs Using Millimeter-wave Technology*
- *Performance that is not affected by weather conditions.*

ADVANTAGES

- *Sensitivity*
- *Reliability & Performance*
- *Fully Customizable Mounting*
- *Robustness*
- *Privacy Protection*
- *Low power*
- *Safety*
- *High Accuracy*

POTENTIAL APPLICATIONS

- *Automotive Industry*
- *Indoor Monitoring and Security*
- *Industrial Applications*
- *Healthcare and Medical*
- *Smart Home and IoT*
- *Robotics and Automation*
- *Security and Surveillance*

CONCLUSION & CONTACT

This advanced MIMO FMCW radar operating in the 60–64 GHz band offers precise detection and seamless integration due to its compact size, making it ideal for various applications ranging from industrial automation to security and defense. Its high-performance design, which can be combined with customizable interfaces, ensures reliable operation in complex and challenging environments, making it an ideal solution for a wide range of uses

For additional information, custom configurations, or integration support, please contact us:

- *Email: info@itas-eng.com*
- *Phone: +90 (312) 502 5691*
- *Website: <https://itas-eng.com/>*