

IRIS-03A

Automotive Corner Radar

*Automotive/Industrial LRR/MRR Corner Radar
Versatile Ready-made Radar Product
Wide Field of View*

Surround Monitoring Corner Radar

Innovative product for real-time monitoring & alerting to cover whole 360° surrounding area, IRIS products intelligently recognize even the blind area traditional vehicles have difficulty to detect.



Overview

IRIS-03A is an innovative product designed for industrial & automotive market segment. It serves as the sensor for environment detection to detect human, vehicle or objects around the object. It is the reliable guardian for a car which can be used to remove blind spots, to detect front or rear crossing traffics, to recognize objects, etc. IRIS-03A consists of two RM14-03A radar modules installed at the right angle as well as its housing part of the product. Using millimeter radio waves, the RM14-03A provides the ability to effectively detect objects in areas close to the vehicle and alert the vehicle driver. Relatively compact RM14-03A is provided with tiny form-factor to feature its usage performance for designated industrial vehicles market.

Applications

Automotive: MRR for Automotive Vehicles
Industrial Vehicle: SRR/MRR for Industrial Vehicle
Robotics: Various Sensing Support

Features

Innovative industrial vehicle sensing support
180° azimuth field of view as individual specification
Direct communication with vehicle or host through CAN interface
BCW (Backward Collision Warning)
FCW (Forward Collision Warning)
Blind Spot Removal
Near Object Detection



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IRISc-03A

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IRISc-03A



IRISc-03A & IRIS-03A Products Specification

	IRIS-03A	IRISc-03A
Radar IC	TI AWR1443	TI AWR1443
# Chip / # Tx # Rx	2 Single-chip / 3Tx 4Rx	1 / 3Tx 4Rx
Frequency Range	77-81 GHz	77-81 GHz
Frequency Bandwidth	Max 3.95 GHz	Max 4.00 GHz
# of Target	20	20
Max Detection Range	Vehicle: 10 m Human: 6 m	Vehicle: 45 m Human: 22 m
Range Resolution	0.5 m	0.5 m
Azimuth FoV	180° (±90°)	Vehicle: 120°@ 7 m, 30°@ 45 m Human: 120°@ 3 m, 40°@ 22 m
Azimuth Angle Resolution	18.0°	18.0°
Elevation FoV	30° (±15°)	30° (±15°)
Elevation Angle Resolution	-	-
Max Detection Velocity	± 54.44 km/h	± 54.44 km/h
Velocity Resolution	3.4 km/h	3.4 km/h
Update Rate	10FPS (100msec)	10FPS (100msec)
Output Data	CAN-FD	CAN-FD

About Us

Sensors are key to the next-generation technological disruption for most of the major industry. Smart Radar System Inc. consists of talented group of engineers, specialists and elites who believes in the future technology with devotion and passion for the radar sensor. From long research and development experience on RF antenna design, hardware mechanics, radar signal processing, software/algorithms to adoption of data-based machine learning & big data integration, Smart Radar System desires to grasp global presence to provide technology that can benefit as much industry & market as possible to reach global #1 market leader.