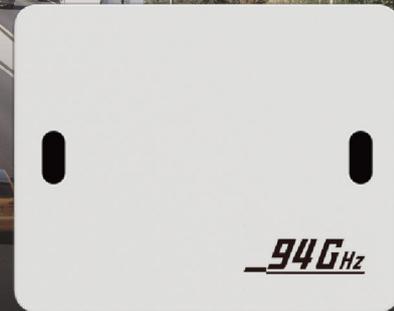


# Traffic Radar Whale Series (92-94GHz)



## Precision

Traffic Flow/Speed Accuracy: 95%



## Ultra-Long Range

Detection Range: 1000m



## Full Coverage

Lane-Level Identification,  
512 Multi-Target Tracking

## Product Introduction

The high-precision millimeter-wave radar for traffic applications adopts advanced joint detection technology for both dynamic and static targets, enabling beyond-visual line-of-sight tracking and high-precision monitoring of all vehicles and pedestrian targets entering the road. It provides real-time monitoring of road conditions around the clock in all weather conditions, continuously tracking traffic. This system is a core sensing device for intelligent traffic safety monitoring, emergency warning systems, and vehicle-road cooperation systems.

- Traffic Flow and Comprehensive Event Detection

- Ultra-Low Power Consumption

- Easy Installation

- Fully Maintenance-free Operation

- Strong Anti-Interference

- All-weather, Day-and-night Operation



Real-Time Road Condition Awareness



Continuous Vehicle Tracking with  
Anomalous Behavior Analysis

## Applications

### • Traffic Flow Monitoring

Real-time, precise monitoring of vehicle speeds and movement tracks, providing comprehensive insights into high-speed traffic dynamics to help optimize traffic control strategies and ensure road safety and efficiency.

### • Multi-Sensor Fusion Perception

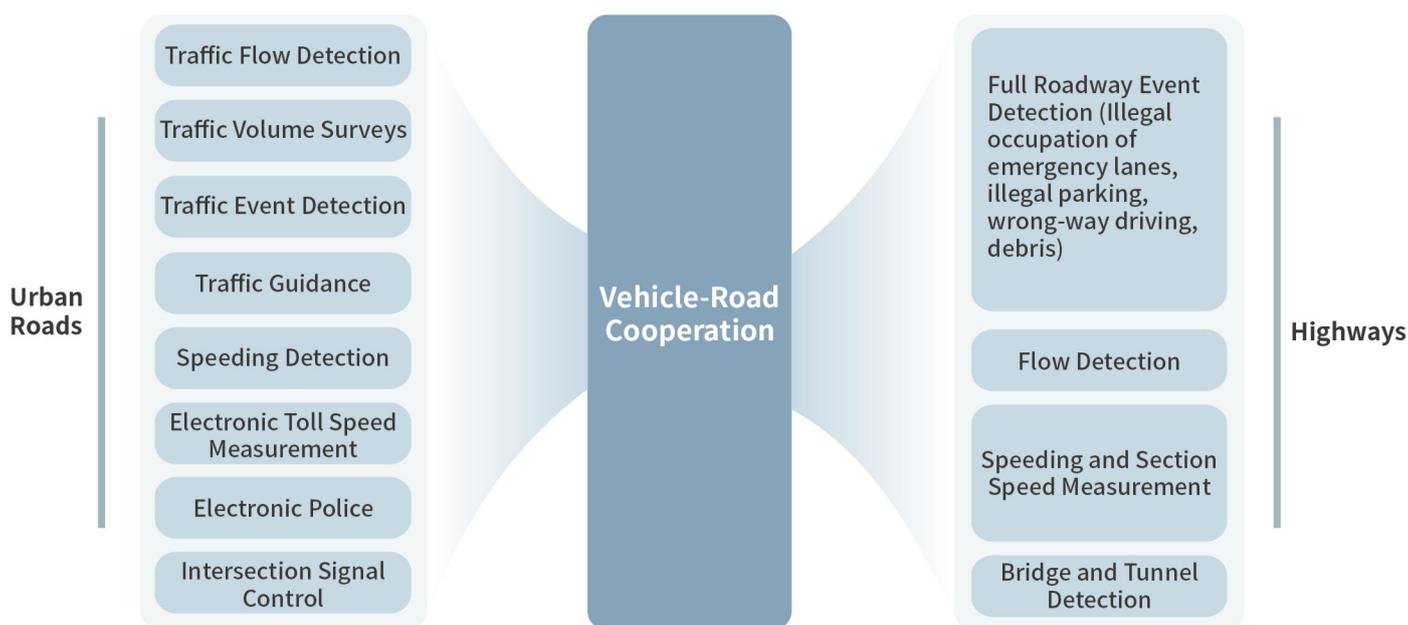
Features video + radar "One Radar, Multiple Targets" technology combined with high-precision maps, enabling all-weather, high-accuracy road condition detection and significantly enhancing road network digital perception capabilities.

### • Abnormal Event Monitoring

Detection of abnormal road conditions in real-time, including parking, speeding, slow movement, wrong-way driving, congestion, and illegal lane changes, providing second-level alerts and quick response mechanisms, effectively preventing secondary accidents and ensuring road safety.

### • Intelligent Perception Platform

Relying on high-precision maps and lane-level awareness, it enables full-dimensional real-time monitoring and accurate handling of abnormal events, significantly improving road network operation and safety management levels.



## Product Specifications

Parameter	Whale-1000	Whale-700	Whale-500
Operating Frequency	92-94GHz		
Vehicle Detection Range	≥1000m	≥700m	≥500m
Detectable Lanes	8		14
Targets Tracked	≥512 ↑		
Speed Measurement Range	±250 km/h		
Speed Accuracy	0.1km/h		
Distance Accuracy	≤1m	≤0.8m	≤0.2m
Azimuth Accuracy	0.05°		0.1°
Range Resolution	1.5m	1m	0.5m
Azimuth Resolution	0.7°	1°	1.2°
Pedestrian Detection Range	≥300m	≥200m	/
Debris Detection Range	≥400m	≥300m	/
Operating Voltage	DC 9V ~36V, ≤20W (average power consumption)		
Operating Temperature	-40°C~+85°C		
Protection Rating	IP67		

### Chainzone Technology (Foshan) Co., Ltd.

Address: Tower 1, Chainzone Complex, No. 11 Juyuan South Road, Guicheng, Nanhai District, Foshan City, Guangdong Province  
 Website: [www.chainzone.com](http://www.chainzone.com) Tel: 0757-86393001 Email: [sales@chainzone.com](mailto:sales@chainzone.com)

