

HUQYS

RTE V29-V

4D Imaging Radar-Video Fusion Traffic Detector



MIMO radar front-end technology

FMCW waveform design

Vehicle **trajectory tracking** algorithm

Radar-Video **Fusion Detection** Algorithm



Wide area multi-target detection

12 lanes horizontally,
300 meters vertically,
512 objects tracking detection



Holographic multi-dimensional perception

Accurately locate vehicle trajectory information,
Multi-section + regional information perception



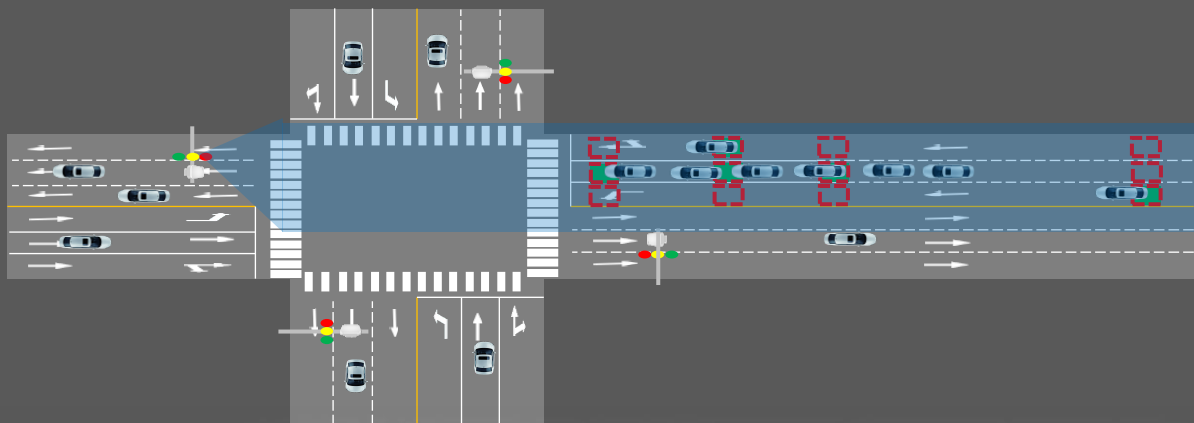
Multi-sensor fusion Multi-target radar

tracking, video forensics,
Coordinate matching and data fusion



High-precision, all-weather suitability

High-precision all-weather data collection,
Not affected by weather and light



Technical Specification

Basic Parameters

Detection range	25m ~ 300m
Range accuracy	0.2m
Range Separation	0.4m
Coverage	12 lanes
Simultaneous detection	Up to 512 objects
Refresh time	50ms
Interval of velocity	-200km/h ~ 200km/h
Speed accuracy	±0.1m/s
Speed Separation	≤0.25m/s
Operating frequency	77GHz
Classification	Large vehicles, Small vehicles, Non-motor vehicles, and Pedestrians
Statistical data	Vehicle volume, Average speed, Time occupancy rate, Time headway, 85th percentile speed

Environmental Parameters

Working temperature	-40°C~+70°C	Humidity	0~95%
Installation height	6 ~ 12m	IP rating	IP67

Video

Resolution, Frame Rate	3840 x 2160 px, up to 25 fps	Video Codec	H.265, H.264, MJPEG
Video FOV	±13°	Lens	12mm fixed focus lens
Sensor	1/2.5 inch CMOS		

General

Power supply	24V DC	Port	RJ45
Power consumption	≤ 30W	MTBF	100000h
Weight and dimension	3200g, 252×200×78mm	Material	PC

