



WHST STA77-5 High Resolution Long-Range Radar User Manual

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product description

STA77-5 high-resolution long-range radar is a radar product based on 77GHz millimeter wave technology developed by WHST. It has the characteristics of small size, lightweight, and high performance. STA77-5 can accurately measure the distance, speed, and angle of the target vehicle within 210m ahead, and can provide safe, accurate, and real-time road condition information on the road ahead. It is suitable for forwarding emergency braking of vehicles (AEB: Autonomous Emergency Braking) Or forward collision warning (FCW: Forward Collision Warning) and other functions.



Figure 1 STA77-5 Radar product physical map

STA77-5 Main product features of vehicle radar

- Highly stable radar based on 77GHz MMIC technology
- The farthest detection range is 220 meters;
- Advanced pulse Doppler system, small size, and lightweight;
- Using continuous wave radar technology, it can accurately detect
- target distance, speed, and angle information;
- Not affected by weather conditions, fully guarantee driving safety

Interface description

The radar equipment terminal connector and wiring harness terminal connector are shown in Figure 4, and the wiring definition is shown in

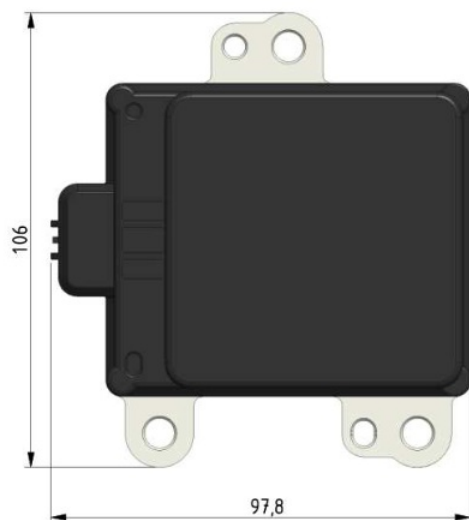
Table 2

A close-up photograph of the rear of the module, showing a black 10-pin connector. Blue arrows point from the numbers '1' and '10' to the first and tenth pins, respectively, indicating the correct orientation for the ribbon cable.

Table 2 Definition of external plug-in pins

NO	Pin definition	Signal function	Note
1	CAN-H	Body CAN bus	The wire diameter is recommended to be ? 0.35mm, 3/4 pins are made into twisted pair
2	CAN-L	Body CAN bus	
3	CANFD-L	CANFD bus	
4	CANFD-H	CANFD bus	
5	NC		
6	NC		
7	NC		
8	NC		
9	POWER	Power supply positive	9-16V DC
10	GND	Power supply negative	

As shown in the radar size diagram in Figure 7, the product size is 106×97.8×27.3mm, and it is directly installed on the car body using reserved three-leg holes to ensure the installation strength. It is recommended to use 3 M5*16 combination screws to fix the radar to the car body mounting hole.



It is recommended that equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.
Important: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Maximum Permissive Exposure Statement These products comply with FCC radiation exposure limits set forth for an uncontrolled environment.

Documents / Resources



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STA775002A, 2A3Y9STA775002A, STA77-5, High Resolution Long-Range Radar, STA77-5 High Resolution Long-Range Radar

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