

STA79-2 Automotive radar

PRODUCT MANUAL



WHST CO., LTD.

FACTORY 1, WANCHUN HIGH-TECH INNOVATION PARK, EAST DISTRICT OF ECONOMIC & TECHNOLOGICAL DEVELOPMENT ZONE, WUHU, ANHUI, CHINA

2021. 11

目 录

1. product description	- 4 -
2. product description	- 5 -
2.1 Technical index	Error! Bookmark not defined.
3. Interface description	- 5 -
4. Radar installation method and size.....	- 6 -

Revision record

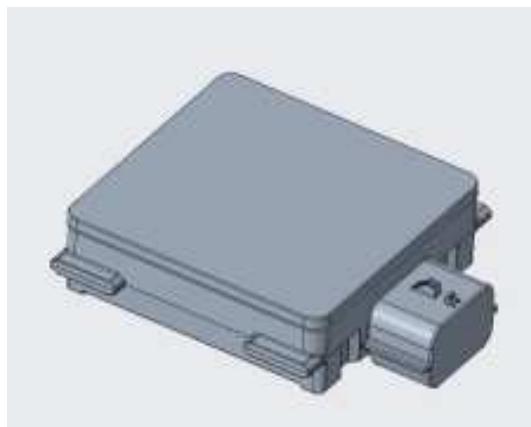
date	version	description	author
2021-11-04	V1.0	initial version	Li Pengfei

1. product description

STA79-2 Corner Radar is the latest product from WHST Co., Ltd. with independent intellectual property rights, which enables the functions of BSD/LCA/RCTA/DOW/RCW.

STA79-2 radar is developed based on the 77GHz advanced MMIC technology, uses FMCW solution and advanced signal and data processing technologies. It can detect multi-target stably and measure multi-parameter information sensitively. The radar supports extended RCTB, BCA, ELK and other functions.

STA79-2 Corner Radar is installed in the rear side of the vehicle. The radar dimensions and structural design are suitable for installation. It can measure the range, velocity, angle and other information of the vehicle behind automatically, which can play an effective role in driving safety.



2. product description

Interface description



Interface Definition 接口 定义	Pin 引脚	Definition 定义	I/O/P	Description 描述
	1	SW_IN	Input	Enable input 使能输入
	2	L_LED	Output	Left LED 左 LED
	3	FDCANH	Input/Output	Private CANH 私有 CAN 高
	4	BEEP	Output	Buzzer control 蜂鸣器控制
	5	DCANH	Input/Output	Public CANH 公共 CAN 高
	6	VPOWER	Power	Power input 电源输入
	7	R_LED	Output	Right LED 右 LED
	8	POSITION	Input	Judging left/right radar 左右雷达判断
	9	GND	Power	Ground 电源地

	10	FDCANL	Input/Output	Private CANL 私有 CAN 低
	11	IGON	Input	IGON Input IGON 输入
	12	DCANL	Input	Public CANL 公共 CAN 低

3. Radar installation method and size

As shown in the right picture, the maximum size of the product containing mounting holes is 83.3mm *74mm *19.6mm. The shell is made of anti-oxidation plastic material, which meets the requirements of ISO 16750. The product can work in all weather conditions with certified IP6K7 rating, and resistant to chemical corrosion.

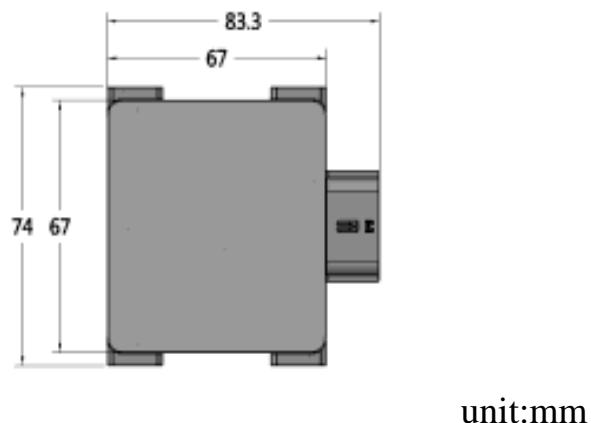


Figure 7 Radar size diagram

The radar is installed on both sides of the rear of the vehicle, with a permissible installation height of 40-100cm. The angle between the radar plane and the horizontal direction is 40~50°, allowing an installation error of $\pm 3^\circ$. An angle of 90° between the radar plane and the ground allows 3° installation errors. Please refer to <WHST STA79-2 radar installation specification> for detailed installation requirements.

Regulation Statement

It is recommended that equipment should be installed and operated with 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

This products comply with FCC radiation exposure limits set forth for an uncontrolled environment.