ALPHA
明泰科技

ARS-SA07

雷達 Radar (UART)

雷達 Radar (CAN)

Installation Guide

1. Product Description

The ARS-SA07 product is an integrated FMCW radar sensor. The radar sensor's main task is to detect objects and measure their speed and position relative to the movement of the vehicle in which it is fitted. Alpha's highly cost effective ARS-SA07 radar sensor provides vehicle manufactures the ability to offer customers advanced driver safety assistance features in all vehicle segments. The ARS-SA07 Radar Sensor is designed for Forward Collision Warning (FCW), Rear Collision Warning (RCW), Blind Spot Detection (BSD), Lane Change Assistance (LCA), Door Open Warning (DOW) and Rear Cross Traffic Alert (RCTA) applications.

2. Installation and Operation

Sensor should be Positioning on 40~80cm height. ARS-SA07 has Mounting hole to be mount on bracket. After power on, it will start to detection.

3. Features

- Long Range Radar suited to Forward Collision Warning (FCW), Rear Collision Warning (RCW),Blind Spot Detection (BSD), Lane Change Assistance (LCA), Door Open Warning (DOW) and Rear Cross Traffic Alert (RCTA) applications
- Detects moving vehicles, motorcycle, persons and stationary object
- Simultaneous Doppler and FMCW processing whilst fast-scanning (no mode change required)
- Low power consumption and high reliability
- Cost effective and robust design for all vehicle segments
- Small size for easy integration into the vehicle

4. Specification

Parameter	Value	Unit
Radar Characteristics		
Operating frequency	77	GHz
Power Supply	12	V DC
Power Supply (A)@12V	0.16	A
Peak Power Supply (A)@12V	0.667	A
Normal Power consumption	1.92	W
Voltage surge power consumption	8	W
	700	mA
Mounting area	vertically : between 60~80cm above road surface level	
Connector	proprietary 10 pin flat connector	
Temperature range	operating : -40~ +85	°C
	storage: -40~ +90	°C

5. Warning statement

LP0002低功率射頻器材技術規範_章節3.8.2

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前述合法通信，指依電信管理法規定作業之無線電通信。

低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

此產品須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者

FCC 15b devices (15.105)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15.21

Information for user

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC Part 15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation