

장비 규격서

주요구성 부분 및 SPECIFICATION

보행자 감지 레이더 키트 24GHz

1. 특징

- 24 GHz ISM-Band Radar-Module appl. FMCW
- 2 Receive Antennas with I/Q Channels each
- Distance and Velocity Measurements
- Target Detection with Angle Information
- Onboard Signal Generation with DDS
- Onboard Signal Processing with DSC
- SPI or USB Interface
- Weatherproofed Housing

2. 세부규격(성능 및 사양)

- Operating Bands: K-Band, 24 GHz ISM
- Frequency Range: 24.00 GHz ... 24.25 GHz
- Output Power: 20 dBm (100 mW) EIRP, max.
- Radar Method: FMCW with DDS Ramp Generation
- Transmit-Channel (Tx): 1
- Receive-Channels (Rx): 2 (I/Q Data for each Channel)
- Antenna Beam Pattern: 70° (Rx) Azimuth and 24° (Rx) Elevation
58° (Tx) Azimuth and 24° (Tx) Elevation
- Frequency Ramp Duration*1: 1 ms to 20 ms
- Frequency Ramp Resolution*1: 10 Hz
- Polarization: Linear
- Detection Range : Min 10 cm, Max 250 m (in Sky) or 30 m (Human Tracking)
- Angular Resolution: <50 cm @ 15 m Distance (Time of Arrival Principle)
- Interface: SPI/ USB
- Data Rate: max. 12.5 Mbit
- Operating Voltage: 10.5 V ... 13 V
- Standby Power: 1.2 W
- CW Operation: 5 W max.
- Dimension (L x W x H): 95.4 mm x 84.5 mm x 35.6 mm (Housing)
133.7 mm x 84.5 mm x 35.6 mm (incl. Connector)
- Cable Exit: 12-Pin Buccaneer Connector
- Operation Temperature: max. 60°C

3. 표준 및 부속품

- PC-Software
- USB cable/adapter

4. 선택부속 또는 추천부속품

- N/A

5. 용도 및 A/S기간 등

- 표적 탐지 시스템 개발
- 추적 시스템 개발
- 구매 후 1년 무료 A/S