

SN-SMWR06A

Perimeter Radar



Key Features

- Up to 600m vehicle detection and 450m human detection
- High-precision ranging with $\pm 0.75\text{m}$ accuracy and $\pm 1^\circ$ angular measurement
- 24GHz FMCW radar for stable performance in all weather conditions
- Flexible system integration via Ethernet, RS485, and standard network protocols
- IP66-rated design for reliable outdoor deployment

Specifications

Radar	
Radar Type	FMCW (Frequency Modulated Continuous Wave)
Operating Frequency	24–24.25 GHz
Update Rate	8 Hz
Detectable Targets	Humans, vehicles
Detection Range	Human (RCS 1.0 m ²): Up to 450 m Vehicle (RCS 30.0 m ²): Up to 600 m
Detection Angle	Azimuth: 90°, Elevation: 13°
Target Capacity	Up to 32 targets
Range Accuracy	±0.75 m
Range Resolution	1.5 m
Angular Accuracy	±1°
Speed Range	0.5–30 m/s
Speed Accuracy	±0.03 m/s
Speed Resolution	0.06 m/s
Network	
Protocols	HTTP, DNS, NTP, TCP, UDP, DHCP, ARP, SSH
Interface	
Network Interface	1 × RJ45 (10/100 Mbps, PoE+)
Alarm Interface	1 × Digital Output
RS-485	1
General	
Power Supply	12 V DC / PoE+ (IEEE 802.3at)
Power Consumption	≤ 17 W
Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Storage Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Ingress Protection	IP66
Dimensions	235.1 × 175.1 × 53.7 mm (9.26 × 6.90 × 2.12 in.)
Net Weight	Approx. 1.65 kg (3.64 lb)

Dimensions (mm)

