

SN-SMWR07W

Perimeter Radar



Key Features

- Up to 3000 m long-range detection for large vessels
- High-precision ranging with $\pm 2\text{m}$ accuracy and $\pm 1^\circ$ angular measurement
- 24GHz FMCW radar for stable performance in all weather conditions
- Flexible system integration via Gigabit Ethernet, RS485, and standard network protocols
- IP66-rated design for reliable outdoor deployment

Specifications

Radar	
Radar Type	FMCW (Frequency Modulated Continuous Wave)
Operating Frequency	24.00–24.25 GHz
Update Rate	10 Hz
Detectable Targets	Large vessels, boats, fishing boats, speedboats
Detection Range	Small vessel (≤ 10 m): Up to 1,500 m Large vessel (> 50 m): Up to 3,000 m
Detection Angle	Azimuth: 90°, Elevation: 13°
Target Capacity	Up to 32 targets
Range Accuracy	± 2 m
Range Resolution	4 m
Angular Accuracy	$\pm 1^\circ$
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 (10/100/1000 Mbps)
Alarm Interface	1 × Relay Output, 1 × Digital Output, 1 × Digital Input
RS-485	1
General	
Power Supply	12 V DC /2.3A
Power Consumption	≤ 28 W
Operating Temperature	-40 °C to 70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to 85 °C (-40 °F to +185 °F)
Ingress Protection	IP66
Dimensions	234 × 315 × 49.0 mm (9.22 × 12.41 × 1.93 in.)
Net Weight	Approx. 3.5 kg (7.72 lb)

Dimensions (mm)

