

12dBi Circular Polarization Antenna

SBA-U2512C

SBA-U2512C is a high-gain UHF RFID antenna designed for long-range, high-performance applications. It offers robust mechanical stability and excellent electrical characteristics, making it suitable for challenging outdoor and industrial environments. With a durable design and optional accessories for heat dissipation and flexible mounting, it provides a dependable solution for large-scale RFID deployments.

Features and Benefits:

- Frequency Range: 902–928 MHz (UHF band)
- Gain: >12 dBi for extended read range
- Polarization: Linear polarization for precision tag detection
- Beamwidth: 40° (horizontal and vertical) for focused signal coverage
- VSWR: ≤ 1.3 for efficient signal transmission and minimal reflection
- Input Impedance: 50 Ω
- Connector: N-type female (N-50KFD) for secure coaxial connection
- IP Rating: IP67 — dust-tight and water-resistant
- Operating Temperature: -40°C to +85°C
- Material: ASA engineering plastic and aluminium for rugged durability
- Optional Heat-Dissipating Base Cover available
- Mounting: Horizontal or vertical installation with optional tilt adjustment; compatible with pole or steel-frame brackets



Applications:

- Intelligent parking systems in smart parking lots
- Logistics and warehouse entrance monitoring
- Highway vehicle ID and traffic management
- Toll collection booths
- Factory gate tracking
- Dockside asset monitoring
- School or institutional access control

SPECIFICATIONS

Physical Parameter	
Dimensions	445mm X 445mm X 40mm
Colour	White
Weight	2 Kgs (Excluding Bracket)
Material	Engineering Plastic ASA, Aluminium
Waterproof Rating	IP67
UHF Technical Parameters	
Operating Frequency	902-928 MHz
Gain	Up to 12 dBi
Beam Width	Horizontal: 40°, Vertical: 40°
VSWR	≤1.3
Polarization	Linear
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	N-50KFD (N-type Female Connector with External Threads)
Environmental Parameters	
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Working Humidity	5% to 95% RH No condensation

Soochak Bharat, with its technical expertise in RFID technology, focuses on designing, developing, innovating, and deploying RFID hardware solutions.

*Read range is dependent on tag size and design.

*Soochak Bharat reserves the right to make changes in the above specifications without notice.

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