

## 9dBi Circular Polarization Antenna

### SBA-U2509C

**SBA-U2509C** is a 9dBi UHF RFID antenna designed for circular-polarized applications within the 902–928 MHz frequency range. Its compact square form with reinforced sealing ensures durability in harsh outdoor or semi-industrial environments. With 70° beamwidth in both planes and IP67 waterproofing, it offers a reliable solution for wide-angle, mid-range RFID deployments.

#### Features and Benefits:

- Frequency Range: 902–928 MHz (UHF)
- Gain: >9dBi for solid mid-range tag reads
- Circular Polarization for consistent performance regardless of tag orientation
- Beamwidth: 70° (H-plane) / 70° (E-plane) for wide-area coverage
- VSWR  $\leq 1.3$  for stable signal efficiency
- Connector Type: N-type female (reverse-fed / side-fed)
- Reinforced ASA plastic and aluminum body for strength and weather resistance
- IP67 Rated – fully sealed against dust and water
- Operating Temperature: -40°C to +85°C
- Bracket installation with adjustable tilt angle



#### Applications:

- Warehouse dock doors
- Retail stockroom monitoring
- Access control points
- Library or archive exits
- 3PL loading bays

<b>SPECIFICATIONS</b>	
<b>Physical Parameter</b>	
Dimensions	258mm X 258mm X 36mm
Colour	White
Weight	0.91 Kgs (Excluding Bracket)
Material	Engineering Plastic ASA, Aluminium
Waterproof Rating	IP67
<b>UHF Technical Parameters</b>	
Operating Frequency	902-928 MHz
Gain	Up to 9 dBi
Beam Width	Horizontal: 70°, Vertical: 70°
VSWR	<=1.3
Polarization	Circular
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	N-50KFD (N-type Female Connector with External Threads)
<b>Environmental Parameters</b>	
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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