

9dBi Carpet Antenna

SBA-U2509CP

SBA-U2509CP is a high-gain 9dBi UHF RFID antenna tailored for underfloor and low-height installation, particularly in smart entry, retail, and event management applications. Operating within the 902–928 MHz band, it features circular polarization and a wide beam (80° horizontal, 40° vertical), ensuring effective tag detection across walkways or passage areas. Its IP65-rated aluminum housing and ultra-slim profile make it ideal for durable, low-profile indoor deployments.

Features and Benefits:

- Frequency Range: 902–928 MHz (UHF)
- Gain: 9dBi for enhanced tag detection over flat zones
- Circular Polarization supports flexible tag orientation
- Wide Beam Coverage: 80° horizontal / 40° vertical
- VSWR ≤ 1.5 for consistent signal performance
- Connector Type: SMA socket
- Strong aluminum body with IP65 waterproof rating
- Slim form factor suitable for floor or carpet-level integration
- Operating temperature: -20°C to +60°C
- Lightning protection via DC grounding

Applications:

- People tracking at entrances or event gates
- Retail loss prevention and POS systems
- Access control in secure indoor areas
- Inventory monitoring across wide flat surfaces
- Smart mat or carpet-based RFID installations



SPECIFICATIONS

Physical Parameter	
Dimensions	1200mm X 500mm X 40mm
Colour	Black
Weight	4 Kgs (Gross)
Packaging Dimensions	1220mm X 520mm X 60mm
Material	Aluminium
Waterproof Rating	IP65
UHF Technical Parameters	
Operating Frequency	902-928 MHz
Gain	Up to 9 dBi
Beam Width	Horizontal: 80°, Vertical: 40°
VSWR	<=1.5
Front Back Ratio	>=20
Polarization	Circular
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	SMA Socket
Environmental Parameters	
Operating Temperature	-20°C to +60°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.