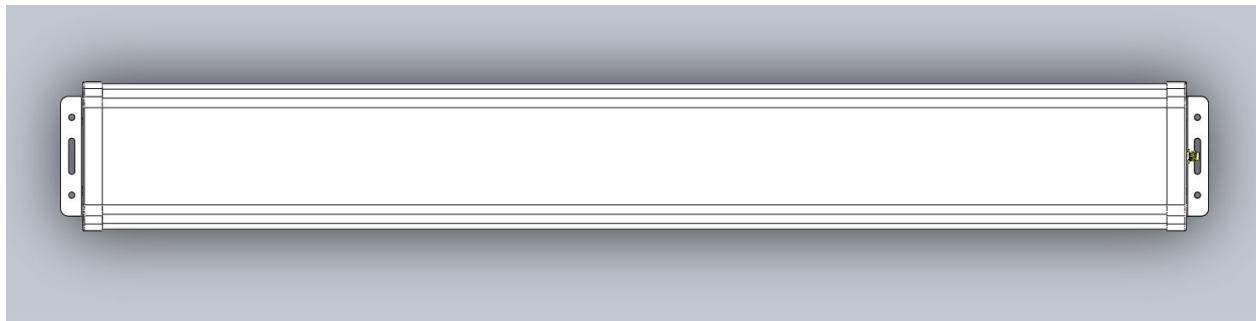


12 dBi Rectangular Antenna

SBA-U2512R

SBA-U2512R is a high-performance **UHF RFID antenna** designed for passive tag reading in the **902–928 MHz** frequency band. With its **12dBi high gain, circular polarization, and wide-angle coverage**, it delivers strong and reliable performance in environments like access control points, smart shelves, and RFID-enabled cabinets. Its slim, rectangular shape allows for easy installation, and its sturdy build supports both indoor and outdoor use.



Features and Benefits:

- Operates in 902–928 MHz UHF RFID frequency band
- High gain >12dBi for long-range reading
- Circular polarization ensures accurate tag reads in various orientations
- Wide-angle coverage along the long side (120°) and narrow beam along the short side (18°)
- Slim rectangular design (950×100×30mm) for easy mounting
- Built with durable PVC and copper radiating material
- Works in extreme temperatures: -40°C to +80°C
- SMA-K side-mounted connector for easy coaxial cable connection
- Can be mounted horizontally or vertically, with adjustable tilt
- Supports installation on steel structures or poles using a bracket

Applications:

- Access control systems (e.g., vehicle gate entry)
- Smart cabinets and lockers
- RFID-enabled retail or warehouse shelving
- Asset tracking and inventory management
- Industrial automation setups requiring directional tag reading

SPECIFICATIONS

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Physical Parameter	
Dimensions	950mm X 100mm X 30mm
Colour	White
Weight	1.1 Kgs (Excluding Bracket)
Material	PVC
Radiating Material	Copper
UHF Technical Parameters	
Operating Frequency	902-928 MHz
VSWR	<=1.5
Gain	Up to 12 dBi
H Plane HPBW	120° ± 5°
E-Plane HPBW	18° ± 3°
Polarization	Circular
Input Impedance	50 Ω
Connector Type	SMA-K
Connector Position	Side-mounted, straight output
Environmental Parameters	
Operating Temperature	-40°C to +80°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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