

14dBi Flat Antenna

SBA-U2514F

SBA-U2514F is a high-gain 14dBi circularly polarized UHF RFID antenna designed for long-range, focused reading within the 902–928 MHz band. With a narrow $30^\circ \times 28^\circ$ beamwidth and solid build quality, this antenna is ideal for directional applications requiring precision and extended coverage. Its slim aluminum housing and SMA interface make it a strong fit for industrial and outdoor installations where performance and durability are critical.

Features and Benefits:

- Frequency Range: 902–928 MHz
- Gain: 14dBi for long-range and focused tag reading
- Circular Polarization for orientation-independent tag detection
- Beamwidth: 30° horizontal / 28° vertical for sharp directional coverage
- $VSWR \leq 1.5$ for stable signal performance
- Front-to-Back Ratio ≥ 20 minimizes interference
- Connector Type: SMA socket
- Max Input Power: 100W
- Durable aluminium housing, designed for long-term use
- Operating Temperature: -20°C to $+60^\circ\text{C}$
- Built-in lightning protection with DC grounding

Applications:

- Long-range RFID portals and vehicle checkpoints
- Directional asset tracking in logistics zones
- Industrial access control and automation
- Large-area warehouse and container monitoring
- RFID reading in outdoor or harsh environments



SPECIFICATIONS

Physical Parameter	
Dimensions	720mm X 500mm X 20mm
Colour	White/Black
Weight	3.8 Kgs (Gross)
Packaging Dimensions	770mm X 550mm X 60mm
Material	Aluminium
UHF Technical Parameters	
Operating Frequency	902-928 MHz
Gain	Up to 14 dBi
Beam Width	Horizontal: 30°, Vertical: 28°
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.