

## 7 dBi Pure Antenna

### SBA-U2507P

**SBA-U2507P** is a compact and durable **7dBi UHF RFID antenna** designed for reliable tag reading in the **902–928 MHz** frequency band. Featuring **circular polarization**, a strong weather-resistant build, and a medium-wide beam angle, it ensures stable and efficient performance in indoor and outdoor environments. Ideal for mid-range applications, its small size, and mounting flexibility make it suitable for access control, inventory tracking, and kiosk systems.

#### Features and Benefits:

- UHF frequency operation: 902–928 MHz
- 7dBi gain for balanced read range and accuracy
- Circular polarization for improved tag orientation flexibility
- Wide beam coverage: 80° horizontal, 70° vertical
- VSWR  $\leq 1.4$  for efficient signal performance
- Front-to-back ratio  $\geq 20$  reduces background interference
- Durable aluminium construction, white finish
- Compact dimensions: 165 × 165 × 20 mm
- SMA socket connector for easy cable connection
- IP65 waterproof rating – suitable for outdoor use
- Mounting bracket installation
- Works in temperatures from -20°C to +60°C



#### Applications:

- Access Control Systems (e.g., RFID-based gates and entries)
- Retail and Warehouse Inventory Management
- RFID-enabled Kiosks and Smart Cabinets
- Industrial Automation and Asset Tracking
- Indoor and Outdoor Mid-Range RFID Solutions

## SPECIFICATIONS

### **Physical Parameter**

Dimensions	165mm X 165mm X 20mm
Colour	White
Weight	0.4 Kgs
Packaging Dimensions	240mm X 240mm X 40mm
Installation	Mounting Bracket
Material	Aluminium
IP Rating	IP 65

### **UHF Technical Parameters**

Operating Frequency	902-928 MHz
Gain	Up to 7 dBi
Beam Width	Horizontal: 80°, Vertical: 70°
VSWR	<=1.4
Front Back Ratio	>=20
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	-20°C to +80°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.