

## 8dBi U.S. Pure Standard Antenna

### SBA-U2508PS

**SBA-U2508PS** is a robust 8dBi UHF antenna optimized for U.S. standard RFID systems operating in the 902–928 MHz range. Featuring circular polarization and wide beam coverage (80° horizontal, 60° vertical), it offers stable read performance even when tag orientation varies. Its compact aluminum body, IP65 weatherproof rating, and ear-mount installation design make it a practical solution for fixed indoor and semi-outdoor RFID setups.

#### Features and Benefits:

- Frequency Range: 902–928 MHz (UHF, U.S. standard)
- Gain: 8dBi for balanced medium-range tag reading
- Circular Polarization improves performance regardless of tag alignment
- Wide Beamwidth: 80° horizontal / 60° vertical
- VSWR  $\leq 1.4$  for efficient signal transmission
- Connector Type: SMA socket
- IP65-rated aluminum housing for weather resistance
- Ear-mount installation for secure placement
- Operating temperature: -20°C to +60°C
- Lightning protection via DC grounding



#### Applications:

- RFID portals in logistics and warehouse automation
- Access control and personnel tracking
- Asset monitoring in retail and healthcare
- Dock door or conveyor-based tag reading
- Mid-range UHF systems in U.S. RFID deployments

<b>SPECIFICATIONS</b>	
<b>Physical Parameter</b>	
Dimensions	220mm X 220mm X 29mm
Colour	White
Weight	1.32 Kgs (Gross)
Packaging Dimensions	290mm X 290mm X 80mm
Material	Aluminium
Installation Method	Ear-mount Installation
Waterproof Rating	IP65
<b>UHF Technical Parameters</b>	
Operating Frequency	902-928 MHz
Gain	Up to 8 dBi
Beam Width	Horizontal: 80°, Vertical: 60°
VSWR	<=1.4
Front Back Ratio	>=20
Polarization	Vertical
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	SMA Socket
<b>Environmental Parameters</b>	
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.

#### **SOOCHAK BHARAT TECHNOLOGIES PRIVATE LIMITED**