

## 6 dBi Pure Antenna

### SBA-U2506P

**SBA-U2506P** is a compact and lightweight **UHF RFID antenna** with a **6dBi gain** and **circular polarization**, designed for efficient tag reading in mid-range applications. Built with durable aluminum and an **IP65 waterproof rating**, it offers strong and reliable performance for both indoor and outdoor environments. Its wide beam angle makes it ideal for areas where broader tag coverage is needed, such as smart cabinets, kiosks, or shelf scanning systems.

#### Features and Benefits:

- UHF Frequency Range: 860–960 MHz
- 6dBi gain for moderate-range tag reading
- Circular polarization ensures better tag detection from different angles
- Wide beam coverage: 105° horizontal and 95° vertical
- Low VSWR ( $\leq 1.3$ ) for efficient signal transmission
- SMA connector for standard cable compatibility
- Durable aluminium housing, lightweight (only 0.2 kg)
- Weather-resistant (IP65) for outdoor or harsh environments
- Compact size: only 130 × 130 × 18.5 mm
- Mounts easily using a bracket (installation-ready)
- Built-in lightning protection

#### Applications:

- Smart Cabinets & Lockers
- Shelf-level Inventory Tracking
- Retail RFID Systems
- Self-service Kiosks
- Short to mid-range Access Control Systems
- Indoor or Outdoor Item Scanning Zones



<b><u>SPECIFICATIONS</u></b>	
<b>Physical Parameter</b>	
Dimensions	130mm X 130mm X 18.5mm
Colour	White
Weight	0.2 Kgs (Excluding Bracket)
Packaging Dimensions	155mm X 155mm X 35mm
Antenna Gross Weight	0.25 Kgs
Installation	Mounting Bracket
Material	Aluminium
IP Rating	IP 65
<b>UHF Technical Parameters</b>	
Operating Frequency	860-960 MHz
Gain	Up to 6 dBi
Beam Width	Horizontal: 105°, Vertical: 95°
VSWR	<=1.3
Front Back Ratio	>=20
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	SMA Socket
<b>Environmental Parameters</b>	
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.

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