

## 6dBi Circular Polarization Antenna

### SBA-U2506C

**SBA-U2506C** is a compact 6dBi UHF RFID antenna engineered for circular-polarized reading in the 860–960 MHz band. Its balanced 75° beam pattern, IP67-rated durability, and small footprint make it ideal for precision-based RFID deployments in both indoor and semi-outdoor environments. Built with reinforced housing and double waterproof seals, it handles rugged use with ease.

#### Features and Benefits:

- Frequency Range: 860–960 MHz (UHF)
- Gain: >6dBi for stable mid-range reading
- Circular Polarization for flexible tag orientation
- Beamwidth: 75° H / 75° V for focused read zones
- VSWR ≤1.3 ensures minimal signal loss
- Connector Type: SMA-K socket
- Durable ASA + aluminum housing, reinforced for tough environments
- IP67 rated for waterproof and dustproof protection
- Lightweight design at only 0.3 kg for space-limited installs
- Operating Temperature: -40°C to +85°C for wide deployment range



#### Applications:

- Library book return and shelf tracking
- Retail checkout counters with space constraints
- Compact access control points
- Workbench-level asset scanning
- Document management stations

<b><u>SPECIFICATIONS</u></b>	
<b>Physical Parameter</b>	
Dimensions	128mm X 128mm X 20mm
Colour	White
Weight	0.3 Kgs (Excluding Bracket)
Material	Engineering Plastic ASA, Aluminium
Waterproof Rating	IP67
<b>UHF Technical Parameters</b>	
Operating Frequency	860-960 MHz
Gain	Up to 6 dBi
Beam Width	Horizontal: 75°, Vertical: 75°
VSWR	<=1.3
Polarization	Circular
Input Impedance	50 Ω
Maximum Input Power	100 W
Lightening Protection	DC Grounding
Connector Type	SMA-K
<b>Environmental Parameters</b>	
Operating Temperature	-40°C to +85°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**