

## 8dBi Circular Polarization Flat Antenna

### SBA-U2508FC

**SBA-U2508FC** is an 8dBi circularly polarized UHF RFID antenna optimized for the 902–928 MHz frequency band. Engineered for stable mid-range performance, it features a low-profile ABS design, IP65-rated weather protection, and moderate beamwidth angles that make it ideal for applications where tag orientation may vary. Whether used indoors or outdoors, it delivers consistent reading accuracy in access control, retail, logistics, and asset tracking environments.

#### Features and Benefits:

- Frequency Range: 902–928 MHz
- Gain: 8dBi
- Circular Polarization for reliable multi-angle tag reading
- Beamwidth: 35° horizontal / 65° vertical
- VSWR  $\leq 1.4$
- SMA Connector, 100W max input power
- IP65-rated ABS enclosure
- Operating Temperature: -20°C to +60°C
- Built-in DC grounding for lightning protection

#### Applications:

- RFID portals for inventory or personnel tracking
- Retail shelving and smart display systems
- Access control at gates and doorways
- Warehouse and logistics item tracking
- Outdoor asset or equipment monitoring



## SPECIFICATIONS

<b>Physical Parameter</b>	
Dimensions	453mm X 163mm X 20mm
Colour	White
Weight	1.2 Kgs (Gross)
Packaging Dimensions	49mm X 22mm X 3cm
Material	ABS
IP Rating	IP 65
<b>UHF Technical Parameters</b>	
Operating Frequency	902-928 MHz
Gain	Up to 8 dBi
Beam Width	Horizontal: 35°, Vertical: 65°
VSWR	<=1.4
Front Back Ratio	>=20
Polarization	Circular
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.