

## 8dBi Narrow Beam Antenna

### SBA-U2508NB

**SBA-U2508NB** is a lightweight and compact 8dBi UHF antenna designed for RFID applications in the 902–928 MHz band. With circular polarization and a focused beamwidth of 100° horizontal and 50° vertical, it ensures precise tag reading in controlled indoor environments. Its slim aluminum body, SMA connector, and excellent VSWR make it ideal for shelf-level tracking, conveyor systems, and smart retail setups.

#### Features and Benefits:

- Frequency Range: 902–928 MHz (UHF)
- Gain: 8dBi for efficient mid-range RFID coverage
- Circular Polarization for consistent tag detection at various angles
- Focused Beam: 100° horizontal / 50° vertical
- VSWR ≤1.3 for optimal power transmission
- Connector Type: SMA socket
- Compact and lightweight aluminum body for easy integration
- Designed for indoor RFID applications
- Operating temperature: -20°C to +60°C



#### Applications:

- Smart shelf and cabinet inventory systems
- RFID conveyor lines in factories or retail
- Indoor asset tracking and item-level monitoring
- Library and file management systems
- Check-in/out systems at counters or kiosks

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<b><u>SPECIFICATIONS</u></b>	
<b>Physical Parameter</b>	
Dimensions	300mm X 135mm X 15mm
Colour	Black
Weight	0.46 Kgs
Material	Aluminium
Waterproof Rating	Indoor Use
<b>UHF Technical Parameters</b>	
Operating Frequency	902-928 MHz
Gain	Up to 8 dBi
Beam Width	Horizontal: 100°, Vertical: 50°
VSWR	<=1.3
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.

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