

8dBi UHF Integrated RFID Reader

SBI-U2508

SBI-U2508 is a high-performance UHF RFID reader and writer with an integrated 8 dBi antenna. Designed with fully independent intellectual property and advanced signal processing algorithms, it delivers fast, accurate, and long-distance tag reading and writing. Despite its compact design, the device ensures high-speed operation, excellent recognition accuracy, and strong protection performance for reliable outdoor or industrial use. It supports mainstream UHF RFID protocols, including **EPC C1G2** and **ISO18000-6C**, and operates within **865–867 MHz** or **902–928 MHz**, adjustable based on regional requirements.

Features and Benefits:

- Flexible label data filtering for accurate tag identification
- Dense tag reading with anti-interference optimization
- Fast multi-tag reading with anti-collision algorithm
- RSSI support for signal strength monitoring
- Built-in circular polarized antenna (6/8/9/12 dBi options)
- Optional external antenna interface
- Interfaces: Ethernet, RS232, RS485, Wiegand 26/34
- 2 opto-isolated inputs and 2 relay outputs
- Includes demo software and SDK
- Output power adjustable up to 33 dBm



Applications:

- Parking management and vehicle tracking
- Logistics and warehouse automation
- Access control and personnel identification
- Tollbooth and highway vehicle information systems
- Smart production line and process control
- Inventory and asset management
- Anti-counterfeiting and security systems
- Hospital, school, and factory entry system

SPECIFICATIONS

Physical Parameter	
Dimensions (in mm)	225mm X 225mm X 55mm
Colour	White
Weight	0.85 Kg approx.
Packaging Material	ABS Plastic
Protection Level	IP65
UHF Technical Parameters	
Protocol	EPC Class 1 Gen2 (ISO 18000-6C)
Features	Supports dense reading and writing, multi-tag recognition, label data filtering, RSSI support, and signal strength detection.
Operating Frequency	China (GB Standard): <ul style="list-style-type: none"> 920–925 MHz (Primary) 840–845 MHz (Optional) Europe (ETSI Standard): <ul style="list-style-type: none"> 865–868 MHz (Optional) India (TEC-Compliant Frequency Band): <ul style="list-style-type: none"> 865–867 MHz North America (FCC Standard): <ul style="list-style-type: none"> 902–928 MHz (Optional)
Power Supply	9 to 32 V DC
Transmitting Power	33dBm±1dB Software adjustable
Operating mode	Supports Broadcasting FM (FHSS) or fixed frequency, configurable via software settings.
Output power adjustment	1 dB step walking
Modulation	DSB-ASK
Read Range	Up to 10 m
Antenna	Internal (8 dBi)
Antenna Specification	Embedded and rounded
Continuous Tag Writing Distance (EPC Code)	≥3 mm (dependent on tag chip performance); writing power exceeds 90% in a non-interference environment.
Communication Interfaces	Supports multiple user interfaces, including TCP/IP, RS232, RS485 , and optional Wiegand 26/34 interface.
Polarization	Circular
Indicators	Buzzer as an audio indicator
Mounting Accessories	Included
Relay	2 relays
Environmental parameters	
Operating Temperature	-20°C to +70°C
Operating Voltage	DC, 9-32 V
Storage Temperature	-40°C to +85°C
Working Humidity	10% 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

Plot No 156, Khasra No 306, Vandana Enclave, Khoda Colony, Ghaziabad, Uttar Pradesh, 201309
Mobile: - 80767 02201 | sales@soochakbharat.com | www.soochakbharat.com