

9dBi UHF Integrated RFID Reader

SBI-U2509

SBI-U2509 is a high-performance UHF-integrated RFID reader with operating frequency- 860 ~ 868MHz / 902 ~ 928MHz (can be adjusted according to the requirements of different countries or regions). It features an internal antenna and supports ISO 18000-6C tags (EPC Class 1 Gen2). Powered by the latest **Impinj E710** chip, a leader in the industry, the reader offers enhanced performance. Its compact form factor makes installation easier and more flexible.

Features and Benefits:

- Uses Impinj E710 chip
- Read range up to 15 meters
- 9 dB circular polarized antenna
- Supports auto inventory mode
- SDK and software integration support available
- Various interface options such as Ethernet, RS232, Wiegand, Wi-fi (optional)
- Small form factor
- The output power reaches 33dbm (adjustable)



Applications:

- Weighbridge Automation
- Parking Management Systems
- Toll Booth Operations
- Factory & Industrial Automation

SPECIFICATIONS	
Physical Parameter	
Dimensions (in mm)	270mm X 270mm X 80mm
Colour	White
Weight	2.350 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 FHSS (Frequency Hopping Spread Spectrum) with software-configurable frequency settings.
Output power adjustment	1 dB step walking
Modulation	DSB-ASK
Read Range	Up to 15 m
Antenna	Internal (9 dB)
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	0°C to +60°C
Operating Voltage	DC, 9-32 V
Storage Temperature	-30°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.

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