

## 6dBi UHF Integrated RFID Reader

### SBI-U2506

SBI-U2506 is a high-performance UHF RFID reader with an integrated antenna, supporting the ISO18000-6C protocol. It offers optional frequencies of 928 MHz and ETSI 865–868 MHz, with adjustable output power up to 33 dB ±1 dB. Featuring a sleek design, long read range, fast speed, and high accuracy, it is easy to install and ideal for applications like logistics, access control, anti-counterfeiting, and smart manufacturing.

#### Features and Benefits:

- Supports label data filtering
- Optimized for dense tag reading
- Enables fast multi-tag recognition
- RSSI support for signal strength detection
- 6 dBi circular polarized inbuilt antenna (up to 10m range)
- External antenna port for dual-mode use (optional)
- Interface options: Ethernet, RS232, RS485, Wiegand
- I/O: 2 opto-isolated inputs, 2 relay outputs
- Reliable, weather-resistant circuit design
- Includes demo software and SDK support



#### Applications:

- Logistics & Supply Chain Management
- Access Control & Security Systems
- Anti-Counterfeiting Solutions
- Smart Manufacturing & Process Automation
- Asset & Inventory Tracking
- Warehouse & Storage Management
- Vehicle & Toll Gate Identification

<b>SPECIFICATIONS</b>	
<b>Physical Parameter</b>	
Dimensions (in mm)	133mm X 133mm X 51.8mm
Colour	White
Weight	0.8 Kg approx.
Packaging Material	ABS Plastic
Protection Level	IP65
<b>UHF Technical Parameters</b>	
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	860–960 MHz
Power Supply	9 to 28 V DC
Transmitting Power	33dBm±1dB Software adjustable
Operating mode	Fixed Frequency or Frequency Hopping (optional); supports Standalone and Dense Reader Modes.
Output power adjustment	1 db step walking
Read Range	Up to 10 m
Antenna	Internal (6 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	TCP/IP, RS232, RS485, GPIO, and optional Wiegand 26/34, along with other user-defined interfaces.
Polarization	Circular
Indicators	Buzzer as an audio indicator
Mounting Accessories	Included
Relay	2 relays
<b>Environmental parameters</b>	
Operating Temperature	-40°C to +60°C
Operating Voltage	DC, 9-28 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.

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