Intelligent UHF 8-Port Reader

SBR-U25-OS08

The SBR-U25-OS08 is a smart 8-port UHF RFID reader equipped with TNC antenna interfaces and a powerful built-in RK3568 embedded control board. It supports both Android and Linux systems, allowing for custom app integration and standalone operation without the need for an external PC. Designed for high-speed, multi-tag reading, it features fast polling across antennas, advanced signal processing, and strong communication adaptability. Its stable performance makes it ideal for dense environments and critical applications such as vehicle tracking, access control, asset and file management, and warehouse automation.

Features and Benefits:

- Embedded RK3568 controller enables smart, PC-free operation
- Flexible tag data filtering for accurate target identification
- Optimized for dense tag reading with minimal interference
- Fast multi-tag recognition with anti-collision algorithm
- RSSI support for real-time signal strength monitoring
- Interfaces: HDMI, Type-C USB, RJ-45, RS-232, RS-485, Wi-Fi, Bluetooth, 4G
- Supports POE input for simplified wiring
- Connects up to 8 antennas for extended coverage
- 4 opto-isolated inputs and 4 relay outputs
- Includes demo software and SDK for easy development
- Durable aluminium alloy housing with efficient heat dissipation

Applications:

- Vehicle Tracking & Inspection
- Access Control (Personnel & Customs)
- Asset & Inventory Management
- File & Document Tracking
- Warehouse & Storage Automation

SPECIFICATIONS

Physical Parameter	
Dimensions (in mm)	213.5mm X 125mm X 37.5mm
Colour	White
Weight	1.3 Kg approx.
Packaging Material	Aluminium
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.
CPU	**Processor:** RK3568, quad-core 64-bit Cortex-A55 **Speed:** 2.0 GHz
Memory	**Memory:** 2GB RAM **Storage:** 16GB eMMC (embedded flash storage)
Operating Frequency	**China (GB Standard):** • 920–925 MHz (Primary) • 840–845 MHz (Optional) **Europe (ETSI Standard):** • 865–868 MHz (Optional) **India (TEC-Compliant Frequency Band):** • 865–867 MHz **North America (FCC Standard):** • 902–928 MHz (Optional)
Power Supply	9 to 30 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	8 TNC antenna interface
Continuous Tag Writing Distance (EPC Code)	≥5 m (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 with Wi-Fi, BT, 4G and other Communication modes.
IO	4 opto-isolated inputs and 4 opto-isolated outputs (GPIO)
Pilot Lamp	1-channel power supply status light 1 system operation status indicator 1-channel communication activity light 8-port UHF antenna interface status LEDs
Relay	4 relays
Operating System	Android, Linux
Display Interface	HDMI Joggle
Environmental parameters	
Operating Temperature	-20°C to +70°C
Operating Voltage	DC, 9-30 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.