

FSC-H02

UHF RFID Smart Item Finder

Product Specification



Product Overview

The FSC-H02 is a multifunctional UHF RFID Inventory Handheld Terminal, compliant with ISO 18000-6C / EPC C1G2 / Gen2X protocols.

It supports China 920–925MHz, FCC 902–928MHz, and ETSI 865–868MHz frequency bands, with adjustable RF output power from 0–33dBm.

The device provides fast tag locating capability and supports Bluetooth, Wi-Fi, and 4G wireless communication. It can connect to mobile phones or tablets via Bluetooth, or exchange data with backend systems over Wi-Fi/4G.

It offers an optional Android 10 OS, a 2MP camera, and both 1D/2D barcode scanning.

Compared with traditional handheld UHF readers, the FSC-H02 is lightweight and provides long-range reading, rapid tag locating, and high anti-interference performance, making it suitable for libraries, logistics, warehousing, asset management, retail, and more.

Product Advantages

- Built-in circularly polarized antenna with adjustable power for both long-range reading and close-range tag pinpointing—ideal for book/library, logistics, and retail single-item search.
- Built-in orientation sensor with patented algorithm for rapid direction guidance and front-facing vibration feedback.
- Optional large storage capacity, supporting over 50,000 tag records.
- Supports standalone operation or Bluetooth collaboration with smart devices.
- Direct Wi-Fi/4G connectivity for backend data transmission.
- Supports UHF RFID + optional 1D/2D barcode scanning.
- Uses industry-leading high-performance RF chipset for superior reading speed, accuracy, and anti-interference capability.

- Custom-designed housing; ergonomic UI.
- Supports audio prompts + vibration feedback.
- Supports near-field issuing mode with AI algorithm to prevent mis-issuing tags.
- Optional high-capacity battery pack, up to $\geq 10000\text{mAh}$.
- Dual-battery design, supporting hot-swap without power-off.



Typical Applications

- Library & archive management
- Logistics & warehouse management
- Supply-chain management and production automation
- Retail store management, hotel management
- Intelligent vehicle access control, parking systems, automotive weighing systems
- Asset in/out management

Technical Specifications

Physical Characteristics	
Item	Specification
Dimensions	206 × 96 × 96 mm
Weight	Approx. 400g
Housing Material	Engineering plastic
Touch Screen	Optional
Display	2.4 inch, 240×320
Speaker	1
Microphone	1
Indicators	1×bi-color LED (charging/Bluetooth), 1× single-color LED (locating)
Keys	Side: Up/Down rotary; Front: Return, M key

Main Functions	
Item	Specification
Operating System	Android 10 (optional)
Processor	Quad-core 64-bit ARM Cortex-A53, 2.0GHz; Optional 2GB RAM + 16GB ROM
Air Protocol	EPC C1G2 / ISO18000-6C / Gen2X
Wireless Communication	Bluetooth 2.1+EDR/3.0/4.1LE/4.2BLE Wi-Fi 2.4/5GHz (802.11a/b/g/n/ac) 4G LTE-FDD / LTE-TDD / WCDMA / GSM/EDGE
Positioning	GPS + BDS
Camera	2MP camera
Charging & Firmware Upgrade Port	USB Type-C
Battery Capacity	Main: 5000mAh / Secondary: 200mAh
Operating Mode	Fixed frequency / Frequency hopping
Features	Dense-tag reading, OTA firmware upgrade, RSSI support

RFID Performance	
Operating Frequency	ETSI 865–868MHz / China 920–925MHz / FCC 902–928MHz
RF Output Power	Up to 33dBm
Power Adjustment	1 dB step

Channel Bandwidth	< 200KHz
Antenna	Circularly Polarized
Read Range	0–15 m (dependent on power, antenna, tag & environment)
Write Range	0–10 m (dependent on conditions)
Tag Read Rate	>500 tags/s

Barcode Scanning Performance	
1D Symbologies:	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, ISSN, Code93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code11, Industrial 2 of 5, Standard 2 of 5, AIM128, Plessey, MSI-Plessey
2D Symbologies:	PDF417, QR Code, Micro QR, Data Matrix
Minimum Resolution	≥3mil
Focusing	Manual focus

Environmental Specifications	
Item	Specification
Operating Temperature	-20°C ~ +50°C
Storage Temperature	-40°C ~ +70°C
Operating Humidity	10%–95% RH (non-condensing)

Mechanical Drawings

