

HF | NFC - Stationary Reader **ACS - ACR1252U**

- ISO/IEC 18092 (NFC); ISO/IEC 14443 Type A & B (T=CL)
- ISO/IEC 7816 Class A SAM slot
- Programmable read/write speed, LED and buzzer
- USB CCID and PC/SC compliant
- USB firmware upgrade supported



HF | NFC - Stationary Reader Secure Contactless Applications

The ACR1252U from Advanced Card Systems Ltd. is an NFC Forum-certified USB NFC contactless reader developed for secure and flexible contactless applications. Based on 13.56 MHz technology, it supports ISO/IEC 18092, ISO/IEC 14443 Type A & B, MIFARE and FeliCa cards, enabling broad interoperability across NFC ecosystems.

Equipped with an ISO/IEC 7816-compliant SAM slot, the ACR1252U supports key diversification and mutual authentication for high-security transactions. Its compliance with CCID and PC/SC standards ensures plug-and-play integration with major operating systems, while support for reader/writer, card emulation and peer-to-peer modes enables versatile NFC use cases.

USB firmware upgrade support, programmable indicators and certified global compliance make the ACR1252U a reliable solution for long-term deployments in professional environments.

Common Applications

- e-Government
- e-Banking and e-Payment
- e-Healthcare
- Loyalty programs
- Physical and logical access control
- Access Control



TECHNICAL SPECIFICATIONS

Contactless Smart Card Interface

Supported Card Types	ISO/IEC 18092 NFC, ISO 14443 Type A & B, MIFARE®, FeliCa
Operating Frequency	13.56 MHz
Reading Distance	Up to 50 mm (Depending on tag type)
Read/Write Speed	106/212/424 kbps (Programmable)
Anti-Collision	Yes
Supported NFC Mode	NFC Reader/Writer, Peer-to-Peer, Card Emulation

SAM Card Interface

Standard	1 x ISO 7816 Class A (5V) Standard SIM size slot
Protocol	T=0, T=1
Read/Write Speed	9.6 – 215 kbps

Host Interface

Protocol	USB CCID
Connector Type	USB Type-A, USB Type-C
Speed	USB 2.0 Full Speed (12Mbps) Compatible with USB 3.0
Supply Voltage	5VDC
Current Consumption	Max. 200mA
USB Firmware Upgrade	Supported

Physical Characteristics

Dimension (L x W x H)	Main Body: 98 x 65 x 12.8 mm Antenna size: 50 x 40 mm
Weight	81 g
Available Colour	Matte Black
USB Cable Length	1 m (Non-detachable)

Peripherals

Buzzer	55.0mm (L) × 65.0mm (W) × 9.0mm (H)
LED	40.0 g ± 5.0 g

Operating Conditions

Temperature	0 - 60°C
Humidity	90% (Non-condensing)
MTBF	500,000 Hours

Certifications & Compliances

Certifications	NFC Forum Certification Mark, IEC/EN 62368, CE, UKCA, FCC, J-LIS, VCCI, TELEC, KC, BIS, RoHS, REACH, WEEE, Microsoft® WHQL
Compliances	USB CCID, PC/SC

Libraries & Tools

Libraries	CT-API
Tools	Android Evaluation Kit, Software Development Kit

Part. No. / Model

	ACR1252U-M1 (USB Type-A)
	ACR1252U-MF (USB Type-C)