

HF | NFC - Stationary Reader ACS - ACR122U

- ISO/IEC 14443 Type A & B, ISO/IEC 18092 (NFC)
- Supports MIFARE®, FeliCa and NFC tags
- User-controllable bi-color LED and buzzer
- USB CCID and PC/SC compliant
- Windows®, Linux®, macOS®, Android®



HF | NFC - Stationary Reader Reader for Contactless Applications

The ACR122U from Advanced Card Systems Ltd. is a compact and cost-effective USB NFC reader designed for a wide range of contactless smart card and NFC applications. Operating at 13.56 MHz and compliant with ISO/IEC 14443 and ISO/IEC 18092 standards, the ACR122U supports MIFARE, FeliCa and NFC tags, ensuring broad interoperability.

As the world's first CCID-compliant NFC reader, the ACR122U enables seamless plug-and-play integration across multiple platforms without the need for proprietary drivers. Its slim form factor, integrated antenna and user-controllable indicators make it suitable for desktop, kiosk and embedded system deployments where simplicity and reliability are essential.

Common Applications

- e-Government
- e-Banking and e-Payment
- Transportation and ticketing
- Physical and logical access control
- Network security and authentication
- Loyalty programs and smart posters



TECHNICAL SPECIFICATIONS

Physical Characteristics

Dimensions	98.0 mm (L) × 65.0 mm (W) × 12.8 mm (H)
Weight	70 g
Color	Pearl White

USB Host Interface

Protocol	USB CCID
Connector Type	Standard Type A
Power Source	From USB port
Speed	USB Full Speed (12 Mbps)
Supply Voltage	5 V
Supply Current	Max. 200 mA
Cable Length	1.0 m, Fixed

Contactless Smart Card Interface

Standard Protocol	ISO/IEC 18092 NFC, ISO 14443 Type A & B, MIFARE, FeliCa
	ISO 14443 T=CL for ISO 14443-4 compliant cards T=CL Emulation for MIFARE Classic, ISO 18092, FeliCa and NFC Tags
Operating Frequency	13.56 MHz
Operating Distance	Up to 50 mm (depending on tag type)
Smart Card Read/Write Speed	106 Kbps, 212 Kbps, 424 Kbps
Antenna Size	50 mm × 40 mm

Built-in Peripherals

Buzzer	Monotone
LED	1 bi-color: Red and Green

Application Programming Interface

PC-linked Mode	PC/SC CT-API (through wrapper on top of PC/SC)
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Operating Conditions

Temperature	0 °C – 60 °C
Humidity	Max. 90% (non-condensing)
MTBF	408,500 hrs

Certifications/Compliance

EN 60950/IEC 60950, ISO 14443, ISO 18092, USB Full Speed, PC/SC, CCID, CE, FCC, RoHS 2, REACH, VCCI (Japan), KC (Korea), Microsoft® WHQL