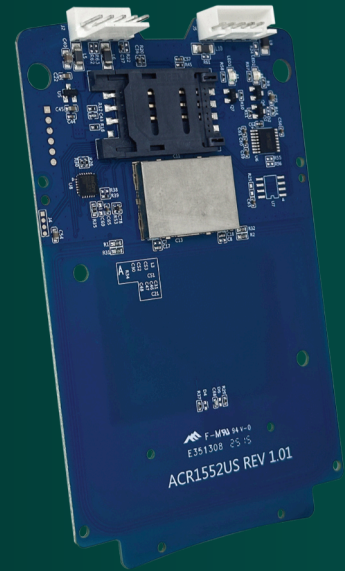# IDCR@FT
RFID & NFC EXPERTS

HF | NFC - Reader Module
ACS - ACM1552D-C7

- ISO 14443 A/B, ISO 15693, ISO 18092
- Integrated ISO 7816 SAM Slot
- USB & RS-232 interface
- Reader/Writer, Card Emulation & Keyboard Emulation
- Firmware upgradeable

HF | NFC - Reader Module
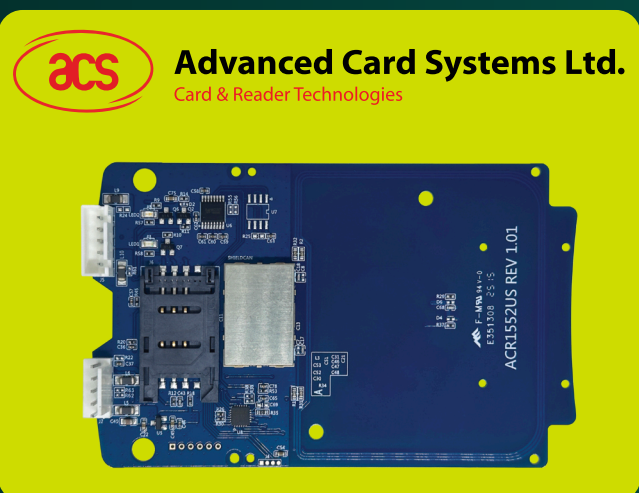## Secure NFC Reader Module with SAM Slot

The ACM1552D-C7, USB/Serial NFC Reader Module(With SAM Slot) is designed with 13.56 MHz contactless technology, supporting ISO 14443 Parts 1-4 Type A and B cards, MIFARE Classic® series, ISO 15693, and ISO 18092 standards. It features USB/RS232 interface and offers a card reading distance of up to 70 mm.

This Plug and Play device includes an ISO 7816-compliant SAM slot for high-level security in contactless transactions, ensuring easy integration into embedded systems. It achieves high-speed communication at up to 848 Kbps for ISO 14443 and 26 Kbps for ISO 15693.

The ACM1552D-C7 supports card reader/writer mode, card emulation mode and Keyboard Emulation (USB interface only), making it a versatile, cost-effective choice for applications like vending machine payment systems, kiosks, and gaming machines. It also features an integrated antenna, USB firmware upgradeability, and extended APDU support.

Common Applications

- e-Government
- e-Banking and e-Payment
- e-Healthcare
- Transportation
- Network Security
- Access Control

acs
Advanced Card Systems Ltd.
Card & Reader Technologies

TECHNICAL SPECIFICATIONS

Contactless Smart Card Interface

Supported Card Types	ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092 NFC, MIFARE Classic®, MIFARE® DESFire®, MIFARE Ultralight®, MIFARE Plus®, FeliCa and Topaz
Operating Frequency	13.56 MHz
Reading Distance	Up to 70 mm (Depending on tag type)
Read/Write Speed	106/212/424/848 kbps (ISO 14443) 26 kbps (ISO 15693)
Anti-Collision	Yes
Supported NFC Mode	Card Reader/Writer, Keyboard Emulation (USB interface only), Card Emulation
Antenna Size	65 mm × 60 mm

SAM Card Interface

Standard	1 x ISO 7816 Class A (5V) Standard SIM size slot
Read/Write Speed	13.4 kbps – 1,250 kbps
Clock Frequency	5 MHz, up to 10MHz (Upon request)
Protocol	T=0, T=1

Host Interface

Protocol	USB or RS-232 (TTL/UART, Upon request)
Connector Type	USB Port connector (J2): 5pin, Molex KK 254 Wire-to-Board Header compatible Serial Port Connector (J5): 5pin, JST B5B-XH-A compatible
USB Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB 3.0
RS-232 Speed	9.6 Kbps, 19.2 Kbps, 38.4 Kbps, 57.6 Kbps, 115.2 Kbps(default), 230.4 Kbps
Supply Voltage	5VDC
Current Consumption	Max. 300mA
Firmware Upgrade	Supported

Physical Characteristics

Dimension (L x W x H)	106.6 mm × 67.0 mm × 16.0 mm Antenna : 65.0 x 60.0 mm
Weight	20g ± 0.2 g
Cable Length	1.5 m, Detachable (Optional)

Peripherals

Buzzer	1 x Programmable Buzzer (Mono-tone)
LED	2 x Programmable LED (Blue & Green)

Operating Condition

Temperature	-20 - 70°C
Humidity	Max. 90% (Non-condensing)
MTBF	500,000 Hours

Certifications/ Compliances

Standards	-20 - 70°C
Regulatory / Environmental	Max. 90% (Non-condensing)

Drivers & Support

Driver Supported OS	Windows®, Linux®, macOS®, AndroidTM
Warranty	1 Year