

HF | NFC Stationary Reader ACS - DualBoost III (ACR1581U)

- ISO 14443 A&B & ISO 15693
- Full-sized card slot for ISO 7816
- ISO 7816 SAM interface
- USB Type - A or Typ - C
- USB Firmware Upgrades



HF | NFC - Desktop Reader Advanced dual interface reader

The Advanced Card Systems DualBoost III (ACR1581U) is a highly advanced dual-interface smart card reader that supports both contact and contactless smart cards in compliance with ISO standards. Its high-speed communication capability of up to 848 kbps and built-in SAM slot provide enhanced security and reliability for demanding smart card applications.

The DualBoost III also offers intelligent support for keyboard emulation and card emulation, making it a versatile and valuable tool for a wide range of smart card applications. Additionally, it supports hybrid and combi cards, detecting when a contactless card has been incorrectly placed in the contact card slot.

The device features USB firmware upgradability, contact memory card support, and extended APDU support, ensuring flexibility and cost-effectiveness across various smart card applications. It is compliant with PC/SC standards, guaranteeing compatibility with a broad range of smart card systems and applications.

The DualBoost III is a powerful and versatile smart card reader. Its advanced features make it an ideal choice for demanding smart card applications in the finance, healthcare, and government sectors, where high levels of security and reliability are essential.

Common Applications

- e-Government
- e-Healthcare
- Single Sign On
- Loyalty Management
- Membership Management
- Access Management



TECHNICAL SPECIFICATIONS

Contactless Interface

Operating Frequency	13.56 MHz
Supported Standards	ISO 14443 Type A & B Parts 1-4, ISO 15693, MIFARE®, FeliCa, NFC Tags, SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card
Reading Distance	Up to 70 mm (Depending on tag type)
Read / Write Speed	106/212/424/848 kbps (ISO14443) 26 kbps (ISO15693)
Operation Modes	Read / Write, Keyboard Emulation & Card Emulation

Contact Smart Card Interface

Number of Slot(s)	1 Full-sized Card Slot
Supported Card Types	ISO 7816 Class A, B, C (5V, 3V, 1.8V), Memory Cards, Microprocessor Cards, (T=0, T=1)
Supply Current	Max. 60 mA
Read/Write Speed	13.4 - 1,250 kbps
Clock Frequency	5 MHz, up to 10MHz (Upon request)
Card Connector	ICC Slot: Landing
Card Insertion Cycles	Min. 300,000

SAM Card Interface

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

Host Interface

Interface	USB 2.0
Protocol	USB CCID
Interface Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB 3.0
Firmware Upgrades	Supported

Physical Characteristics

Dimension	Main Body: 120.5 x 72.0 x 20.4 mm Antenna size: 63 x 54 mm
Weight	143 g
Connector Type	USB Type-A or Type C (upon request)
IP Protection	N/A
Temperature	0 - 60°C
Humidity	90% (Non-condensing)
MTBF	500,000 Hours

Electrical Characteristics

Voltage	5VDC
Consumption	Max. 300mA
Buzzer	1 x Programmable Buzzer (Mono-tone)
LED	2 x Programmable LED (Blue & Green)

Certifications & Compliances

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

Drivers & Support

Supported OS	Windows®, Linux®, macOS, Android™
Supported Libraries	CT-API
Tools	Software Development Kit

Part No. / Model

25-NSR-A01-0004-01	HID / Read Write / PC/SC - USB-A
25-NSR-A01-0005-01	HID / Read Write / PC/SC - USB-C (upon request)