

ISO 7816 - Stationary Reader **ACS - ACR40U-B**

- ISO 7816 Class A, B, C
- EMV™ & PBOC Level 1 Certified
- USB Type-A & USB Type-C
- Firmware upgradeable & user data storage
- USB CCID & PC/SC Compliant



ISO 7816 - Stationary Reader Compact USB Contact Smart Card Reader

Introducing the ACR40U, ACS's latest compact high-speed USB contact smart card reader. It provides seamless support for ISO 7816 Class A, B, and C smart cards, microprocessor cards using T=0 and T=1 protocols, and a wide range of memory cards available in the market.

The ACR40U features two LED lights, providing clear visual indicators for card and reader status. Exciting new additions include firmware upgradability and on-device user data storage, catering to various application scenarios. It also comes with a stand accessory that allows for multiple configurations, including upright and horizontal orientations.

The ACR40U is compliant with CCID, PC/SC, and Microsoft® WHQL standards, ensuring seamless integration with various operating systems such as Windows®, Linux®, macOS, iOS, iPadOS, and Android™.

Both USB Type-A and USB Type-C interfaces are available, providing flexible connectivity options.

Common Applications

- e-Government
- e-Banking and e-Payment
- e-Healthcare
- Public Key Infrastructure
- Network Security
- Access Control



Advanced Card Systems Ltd.
Card & Reader Technologies



TECHNICAL SPECIFICATIONS

Contact Smart Card Interface

Number of Slot(s)	1 Full-Sized Card Slot
Supported Card Types	ISO 7816 Parts 1-4, Class A, B, C (5 V, 3 V, 1.8 V), Microprocessor Card (T=0, T=1), Memory Card, MyKad Card, CAC, J-LIS, SIPRNET Smart Card
Supply Current	Max. 50 mA
Read/Write Speed	9.6 – 600 Kbps
Clock Frequency	4.80 MHz; Operates Up to 16MHz
Card Connector	Contact
Card Insertion Cycles	Min. 200,000
PPS (Protocol and Parameters Selection)	Supported
Short Circuit Protection	Supported

Host Interface

Protocol	USB CCID
Connector Type(s)	ACR40U-B1: USB Type-A ACR40U-BF: USB Type-C
USB Interface	USB 2.0 Full Speed (12Mbps) Compatible with USB 3.0
Supply Voltage	5 V
Cable Length	1m (Non-Detachable)

Application Programming Interface

PC-Linked Mode	PC/SC
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Other Features

Firmware Upgrade	Supported
User Data Storage	Supported

Physical Characteristics

Dimensions	62.5mm (L) × 67.6mm (W) × 58.5mm (H)
Weight	65.0 g ± 5.0 g
Available Colour(s)	White

Peripherals

LED	Blue & Green
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Operating Conditions

Temperature	0 - 65°C
Humidity	Max. 95% (Non-Condensing)
MTBF	600,000 Hours
Power Supply	USB Port

Certifications/ Compliances

Standards	USB CCID, PC/SC, EMV™ Level 1 (Contact), PBOC Level 1 (Contact), TAA, J-LIS, Microsoft® WHQL
Regulatory / Environmental	CE, IEC/EN 62368, UKCA, FCC, VCCI, RoHS, REACH, WEEE, UL 62368, KC

Driver Supported OS

Driver Supported OS	Windows®, Linux®, macOS, iOS, iPadOS, Android™, Solaris™
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Part. No. / Model

	ACR40U-B1 (USB Type-A)
	ACR40U-BF (USB Type-C)