



CONTACTLESS READERS

AquaGuard

IP67-rated NFC USB Reader

The AquaGuard NFC USB Reader is ACS's fourth-generation NFC reader device built on 13.56 MHz contactless technology. It operates with contactless cards and devices adhering to ISO 14443 Type A and B, ISO 15693, and ISO 18092 standards. The IP67 rating signifies its exceptional resistance to dust and water, ensuring uninterrupted operation even under challenging conditions.

In compliance with both CCID and PC/SC standards, AquaGuard NFC USB Reader offers high-speed communication of up to 848 kbps. The reader's IP67-certified shell houses USB firmware upgradable features, extending its versatility and cost-effectiveness across numerous sectors, including finance, healthcare, and government.

This IP67-rated NFC reader intelligently supports three modes of NFC: reader/writer, card emulation, and keyboard emulation. Its robustness and versatility open up a wide array of potential applications such as, loyalty program, access control systems, and transportation ticketing. The AquaGuard Reader, with its IP67 support, stands as a resilient and dependable choice in NFC technology.

KEY FEATURES

- ✓ **Supports Various Contactless Card Types**
 - ISO 14443 Type A & B Parts 1-4
 - ISO 15693
 - ISO 18092 NFC
 - MIFARE® (T=CL), FeliCa, NFC Tags
 - SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card
- ✓ **High-Performance**
 - Read/Write ISO 14443A & B speed of up to 848 kbps
 - Read/Write ISO 15693 speed of up to 26 kbps
- ✓ **Support Various NFC Features**
 - Card Reader/Writer Mode
 - Card Emulation Mode
 - Keyboard Emulation Mode
- ✓ **IP67 Support**
 - Protected against dust and temporary water exposure
- ✓ **Support USB Firmware Upgrade**
- ✓ **Reliable**
 - Certified for international regulations
 - Mean time between failures (MTBF) up to 500k Hours
- ✓ **Compatibility**
 - Support for all major operating systems
 - Windows®, Linux®, macOS, Android™



AquaGuard

*Stand Version(optional)

Common Applications

e-Government
Banking and e-Payment
e-Healthcare
Transportation
Network Security
Access Control
Loyalty Program
Smart Poster/URL Marketing





TECHNICAL SPECIFICATION

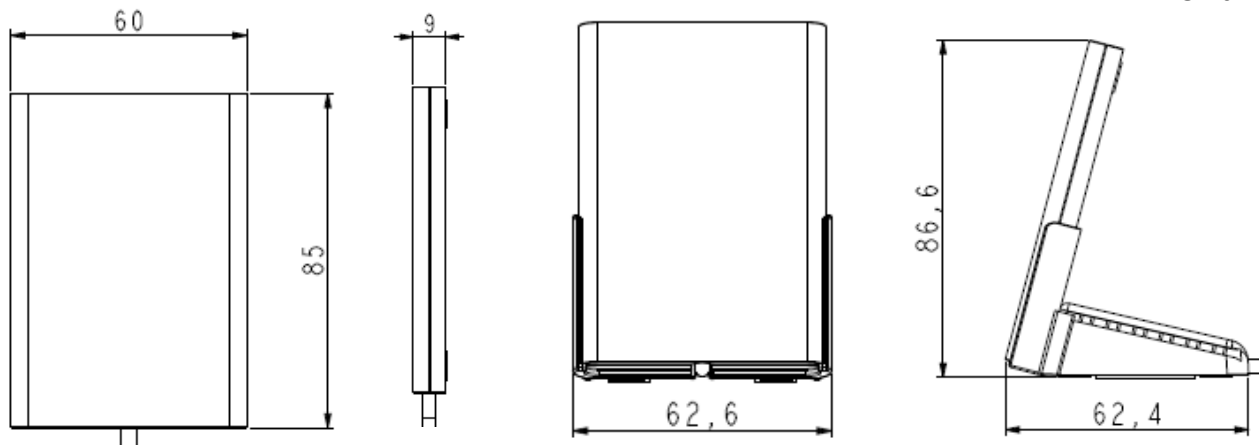
Contactless Smart Card Interface		Peripherals	
Supported Card Types	ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092 NFC, MIFARE®, FeliCa, SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card	Buzzer	1 x Programmable Buzzer (Mono-tone)
Operating Frequency	13.56 MHz	LED	1 x Programmable RGB (Blue & Green & Red)
Reading Distance	Up to 70 mm (Depending on tag type)	Operating Condition	
Read/Write Speed	106/212/424/848 kbps (ISO14443) 26/53kbps (ISO15693)	Temperature	-20 - 70°C
Supported NFC Mode	Card Reader/Writer, Keyboard Emulation, Card Emulation	Humidity	90% (Non-condensing)
		MTBF	500,000 Hours
Host Interface		Certifications/ Compliances	
Protocol	USB CCID	Standards	USB CCID, PC/SC, Microsoft® WHQL, J-LIS, IP67
Connector Type	USB Type-A	Regulatory / Environmental	CE, UKCA, FCC, VCCI, RoHS, REACH, WEEE
Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB 3.0	Libraries & Tools	
Supply Voltage	5VDC	Libraries	CT-API
Current Consumption	Max. 300mA	Tools	Software Development Kit
USB Firmware Upgrade	Supported	Drivers & Support	
Physical Characteristics		Driver Supported OS	Windows®, Linux®, macOS, Android™
Dimension (L x W x H)	Main Body: 85.0 x 60.0 x 9.0 mm With Stand: 86.6 x 62.6 x 62.4 mm	Warranty	1 Year
Weight(±5g)	67g 88g (with stand)	Model/Part Number	
Available Colour	White	USB Type-A	ACR1552U-A2
USB Cable Length	1 m (Non-detachable)	(Optional Stand)	ACR1552U-STD001

MECHANICAL SPECIFICATION

AquaGuard

*Stand-Version

Unit: mm



About ACS

Advanced Card Systems Ltd. (ACS), founded in 1995, is Asia Pacific's top supplier and one of the world's top 3 suppliers of PC-linked smart card readers. ACS is the winner of the Product Quality Leadership Award for Smart Card Readers from Frost & Sullivan. ACS was listed in Forbes Asia's "Best Under a Billion" list for several years, an inter-industry list comprised of 200 top-performing publicly listed companies in the Asia-Pacific, with sales between US\$5 million and US\$1 billion. ACS develops a wide range of high-quality smart card reading/writing devices, smart cards and related products and distributes them to over 100 countries worldwide.

Click [here](#) for Sales Enquiry

Tel: +852-2796-7873

Fax: +852-2796-1286

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