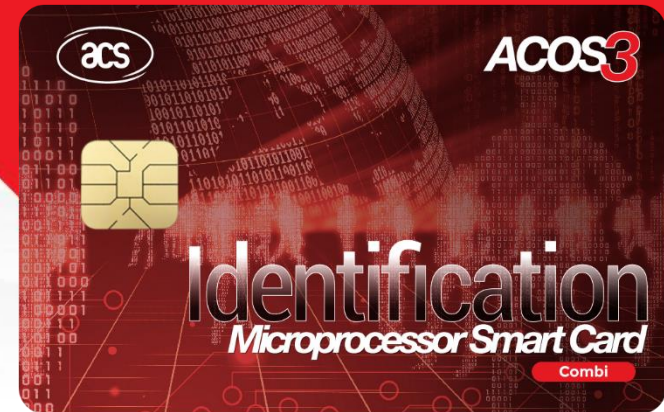




# ACOS3

## Microprocessor Smart Card

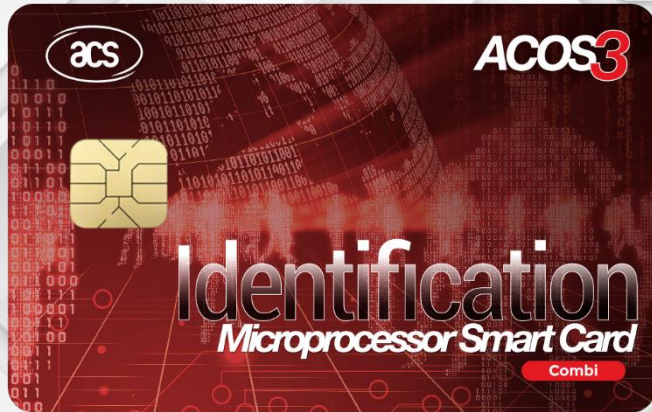


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# Outline

1. Product Information
  - Product Overview
  - Product Features
  - Technical Specifications
2. Product Applications
3. Related Software Products





# Product Information

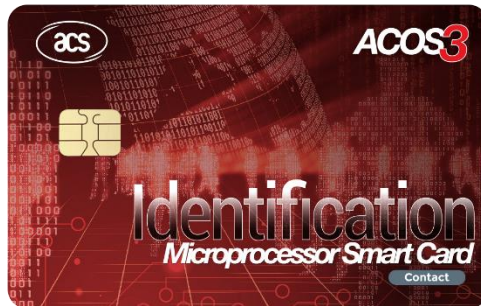


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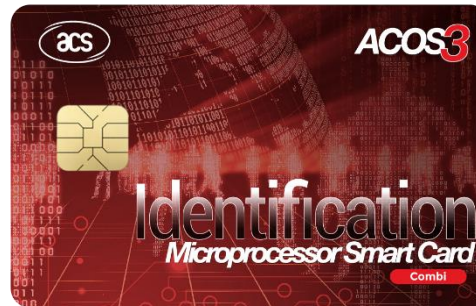
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# Product Overview

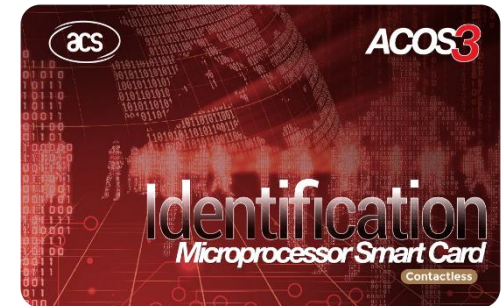
## ACOS3 Series



**PN: ACOS3**  
**ACOS3 (Contact)**



**PN: ACOS3-G1K**  
**ACOS3 (Combi)**



**PN: ACOS3-G1L**  
**ACOS3 (Contactless)**

*The ACOS3 is also available in module and SIM-sized form factors. ACS also offers various customization options.*



# Key Features of ACOS3

## Speed and Memory

- Contact: 32 KB/72 KB  
Combi/Contactless: 8 KB
- Configurable ATR (Answer To Reset)
- Anti-tearing Function

## Security Functions

- Provides multi-level secured access hierarchy
- Supports Secure Messaging
- Supports Mutual Authentication and Session Key Generation

## Cryptographic Algorithms

- DES/3DES
- AES
- MAC
- Random Number Generator

## Certifications and Compliance

- ISO 7816 Parts 1, 2, 3
- ISO 14443 Parts 1-4, Type A



# Technical Specifications

		ACOS3 Contact	ACOS3 Combi	ACOS3 Contactless
Product Code		ACOS3-B / ACOS3-D	ACOS3-G1K	ACOS3-G1L
User EEPROM Memory				
User Memory		32 KB/ 72 KB	8 KB	8 KB
Endurance (write/erase cycle)		100,000	500,000	500,000
Compliance to ISO Standards				
Contact	ISO 7816 – 1/2/3	✓	✓	-----
Contactless	ISO 14443 - 1/2/3/4	-----	✓	✓
	Type A	-----	✓	✓



# Technical Specifications

	ACOS3 Contact	ACOS3 Combi	ACOS3 Contactless
Communication Speed and Protocol: Contact Interface			
Protocol	T=0	T=0	-----
Speed	223.2 kbps	223.2 kbps	-----
Communication Speed and Protocol: Contactless Interface			
Protocol	-----	T=CL	T=CL
Speed	-----	106 - 848 kbps	106 - 848 kbps
Operating Conditions			
Temperature	-25 °C to 85 °C	-25 °C to 85 °C	-25 °C to 85 °C

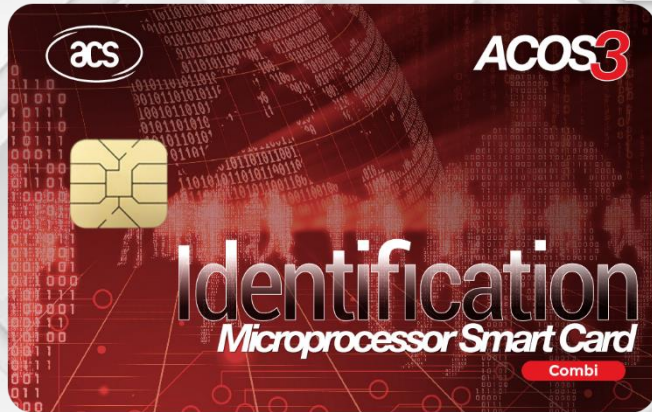


# Technical Specifications

	ACOS3 Contact	ACOS3 Combi	ACOS3 Contactless
<b>File System</b>			
Transparent (Binary File)	✓	✓	✓
Linear Fixed Record	✓	✓	✓
<b>Cryptographic Capabilities</b>			
DES/3DES	56/112/168 bits	56/112 bits	56/112 bits
AES	128/192 bits	-----	-----
MAC	✓	-----	-----
Secure Messaging	✓	✓	✓
Mutual Authentication	✓	✓	✓
Random Number Generator	✓	✓	✓







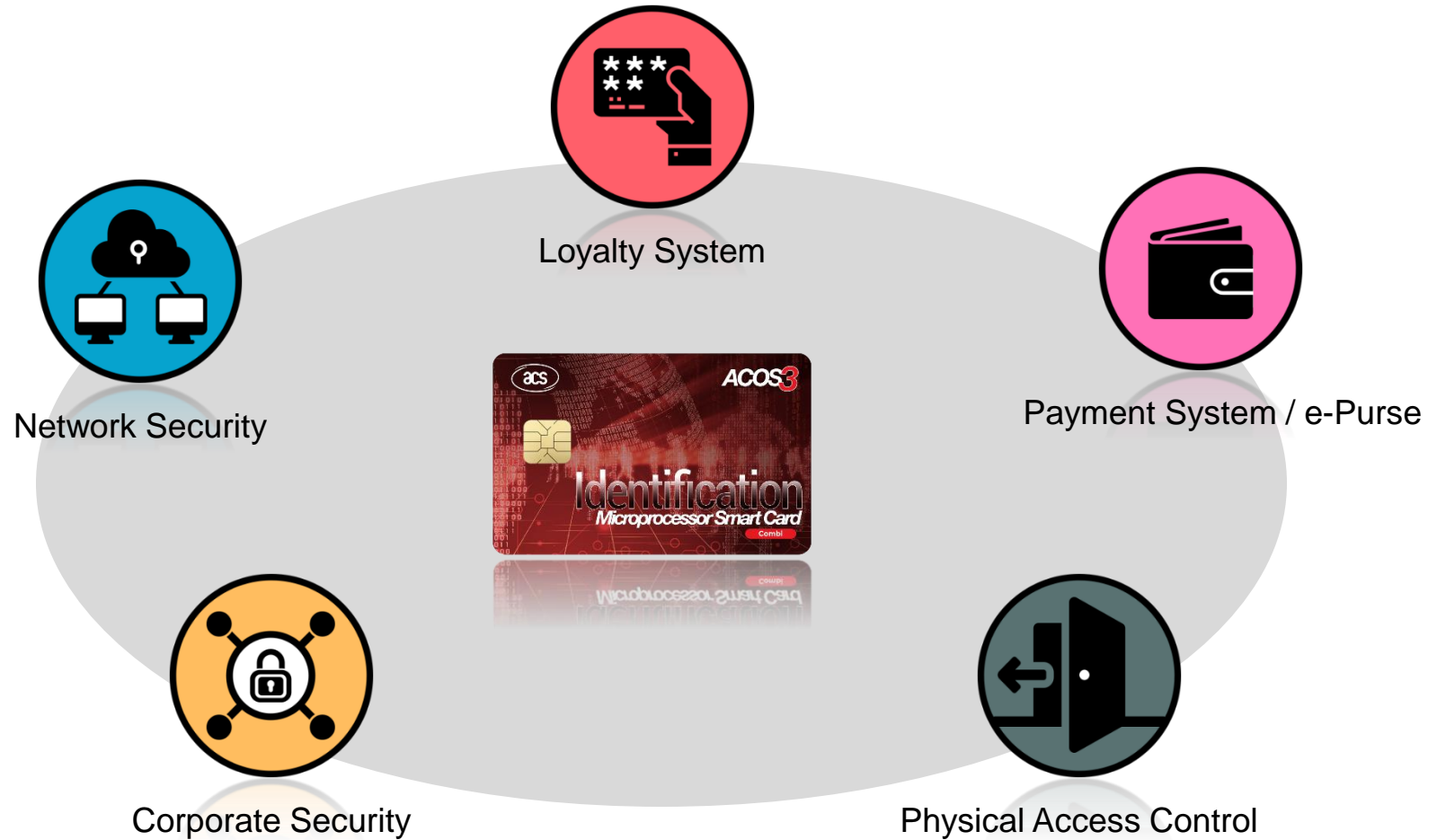
# Product Applications

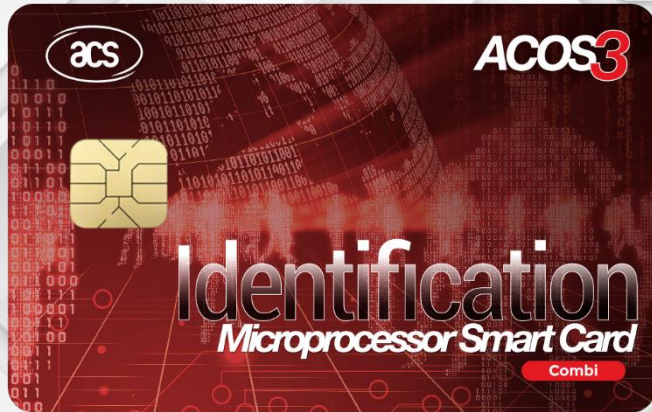


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# In what areas can the ACOS3 be used?





## Related Software Products



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# Software Development Kits

ACS offers various software development kits that use different ACS Readers.

**The ACOS3 card is featured in different SDKs/EVKs offered by ACS, including, but not limited to the following:**

- ACR39 SDK
- ACR1252 SDK
- ACR1251 SDK
- ACR1281 SDK

Contact your ACS sales representative, visit our website at [www.acs.com.hk](http://www.acs.com.hk) or email us at [info@acs.com.hk](mailto:info@acs.com.hk) for more information.



