

# Pass

## Encrypted contactless card for keypad

*Cards sold in packs of 3, 10 or 100 devices*

### Quick access to the security system

To disarm the security system, just present Pass to the reader on the keypad. This copy-protected card allows you to manage security modes without a password, user account and access to the Ajax app.

**Pass is supported by [KeyPad Plus](#).**

### Top-tier data protection

To identify users quickly and securely, KeyPad Plus features the DESFire® technology. It is the best-in-class contactless solution to identify the user by card or key fob.

DESFire® is based on the ISO 14443 international standard and combines comprehensive 128-bit encryption and copy protection. This technology is also used in transportation systems of European capitals and access systems at NASA.

## More about DESFire advantages

### Microchip with smart capabilities

From the user perspective, contactless access works simply. To disarm the system, all you need is to present a card or a key fob to the keypad. But there is an impressive technology behind this simplicity. Pass cards are equipped with DESFire® chips. We compared them to the chips used in most access systems around the world.

Chip	EM-Marin	MIFARE® Classic®	MIFARE® DESFire®
Use	Use Simple access systems: barriers, intercoms, hotel rooms.	Combined access systems, where additional information is stored on the chip: fitness clubs, entertainment centers.	Systems with multi-level access in government, international and military institutions.
Encryption	No	Crypto-1 stream cipher with a key size of 48 bits.  <i>A number of studies have shown the possibility of hacking this cipher with tools that are freely available.</i>	Triple DES encryption and AES hardware encryption with 128-bit key.  <i>It will take several supercomputers and millions of years to hack.</i>
Memory	No built-in memory	Up to 4 KB of built-in memory, which allows you to store data on payment, card expiration date, users.	Up to 8 KB built-in memory that allows you to store user data and access keys to multiple security systems.

## One key for home and office

One Pass card can be connected to 13 hubs

## Full control in the app

In the app, you can set the name and access permissions for each card. You always know who and when changed the security mode — every action is recorded in the event log.

A system administrator can revoke or restrict Pass access permissions in real time.

## Effortless connection

To add Pass to the system, all you need is to open the Ajax app, go into the settings and present the card to the keypad.

## Tech specs

Communication technology	DESFire®
Operating standard	ISO 14443-A (13,56 МГц)
Encryption	+
Authentication	+
Protection from signal interception	+
Possibility to assign the user	+
Maximum number of bound hubs	Up to 13
Compatibility	<a href="#">KeyPad Plus</a>
Operating temperature range	From -10°C to +40°C
Operating humidity	Up to 75%
Overall dimensions	86 × 54 × 0.8 mm
Weight	6 g