

# EV10C1

MIFARE DESFire EV2 ISO Card



## Introduction:

Vanderbilt's EV10C1 smart card is the latest addition to the MIFARE DESFire product family introducing new features along with enhanced performance for best user experience. It fully complies with the requirements for fast and highly secure data transmission and flexible application management.

The main characteristics of this credential are denoted by its name "DESFire": DES indicates the high level of security using a 3DES or AES hardware cryptographic engine for confidentiality and integrity protection of the transmission data. FIRE indicates its outstanding position as a Fast, Innovative, Reliable and sECure IC in the contactless proximity transaction market. MIFARE DESFire EV2 can be used as a MIFARE DESFire EV1 in its default delivery configuration.

Smart cards offer a high level of security and provide the advantage of being multi-purpose. They function as proximity access cards, but since they can store much more information they can also be used as cash cards at company restaurants or vending machines, for example. Compared to previous versions, the MIFARE DESFire EV2 chip can hold as many different applications as the memory size supports and offers a significant increase in operating distance and speed. MIFARE DESFire EV2 delivers the perfect balance of speed, performance and cost efficiency. Installers can benefit from a secure card technology that can provide even more functionality and protection when used with Vanderbilt VR series card readers.

## Features:

- ✓ MIFARE DESFire EV2 ISO card
- ✓ Contactless multi-application smart card compliant with ISO/IEC 14443-2/3 A
- ✓ Backward compatibility mode to MIFARE DESFire EV1
- ✓ Unique 7 bytes serial number
- ✓ Flexible key management – 1 card master key and up to 14 keys per application
- ✓ Proven, Reliable Technology – Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions.
- ✓ Durable – Strong, flexible, and resistant to cracking and breaking.

**VANDERBILT**

23\_MIFARE DESFire EV2 Card\_A-100560\_EN\_Rev.1.0

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## Technical Data / Specification:

Technology	MIFARE DESFire EV2
Operating frequencies	13.56 MHz
Operation	Passive (no battery)
Memory size	4kB EEPROM (non-volatile)
Backwards compatibility	Compatibility mode to MIFARE DESFire EV1
Retention time	25years
Write endurance	200,000 cycles (min) 500,000 cycles (typ)
Write cycle time	1 ms (typ)
Material	PVC
Marking	Card number printed on the card
Operating temperatures	-40° to 70°C
Operating humidity	5-95% non-condensing
Dimensions	54mm x 86.0mm x 0.76mm
Weight	0.058kg
Warranty	3 years



## Ordering Information:

Type	Art. No.	Description	Weight*
EV10C1	V54515-Z140-A100	EV10C1 MIFARE DESFire EV2 ISO card	0.058kg

\*Total weight of the product inclusive of the weight of its accessories and packaging.

## Selected Smart Card Readers compatible with EV10C1:

Type	Art. No.	Description
VR10S-MF	V54504-F101-A100	VR10S-MF MIFARE EV1/EV2 card reader
VR40S-MF	V54504-F102-A100	VR40S-MF MIFARE EV1/EV2 reader +keypad
VR20M-MF	V54504-F111-A100	VR20M-MF MIFARE EV1/EV2 Mullion reader
VR50M-MF	V54504-F112-A100	VR50M-MF MIFARE EV1/EV2 Mullion +keypad



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