

# Gallagher Cards, Keyfobs & Encoding



*Gallagher offer a range of cards and transponders for different reader technologies with various encoding options.*

## Gallagher supports the Mifare contactless smartcard technology because:

- It provides an increased level of security than previous generation access cards;
- Its worldwide popularity ensures its format is supported by many different systems, delivering multiple interoperability benefits;
- They are produced by numerous card manufacturers ensuring a reliable supply chain for the cards;

Gallagher supports three variants of the Mifare smartcard in the latest Gallagher T-Series readers – Mifare Classic, Plus and DESFire EV1, which provides several options for card security, price and performance

Which Mifare smartcard is right for your organisation depends upon your priorities and the key differences are outlined in the table on the following page.

## Card Encoding

Gallagher provides two options for card encoding:

Through Gallagher Command Centre PhotoID or Encoder III, or by Gallagher through your Gallagher Channel Partner

## Gallagher Encoder (125 kHz)

The Gallagher Encoder (125 kHz) is used for encoding and re-encoding Gallagher 125 kHz proximity cards.

## Gallagher Encoder (TIRIS Series)

The Gallagher Encoder (TIRIS Series) is a cost effective compact and operator friendly unit that connects straight to the PC, for encoding TIRIS proximity cards.



## Gallagher Photo ID Card Encoding

Gallagher enables users to encode only, or to print and encode in the same operation, through the PhotoID optional feature in Command Centre. The Mifare card range when encoded via Gallagher PhotoID has the following Technical Specifications:

- 16 Region Codes;
- 50,000 Facility Codes;
- 15,999,999 Card Numbers and
- 15 Issue Levels.

Mifare Classic, Plus and DESFire EV1 cards can be encoded using the Gallagher Mifare USB Encoder, which supports the encoding of:

- Mifare Classic 1K & 4k cards and
- Mifare Plus 2K and 4K cards in both standard security 'S' and extra security 'X' variants.
- Mifare DESFire 2K, 4K and 8K cards

## Gallagher Encoder III

Gallagher Encoder III is a user friendly Microsoft® Windows® XP or Windows 7 software package that allows the on-site encoding of 125kHz proximity cards and keyfobs, Mifare Classic smart cards and Magstripe and TIRIS cards.

Using an industry standard system, Encoder III is used in conjunction with the following Encoder hardware: 125 kHz, Magstripe, TIRIS, Mifare USB.

Product	Dimensions (Length x Width x Depth)	Temperature (Operating)	Temperature (Storage)
MIFARE ISO CARD	85.7mm x 54.0mm x 0.76 - 0.84mm	-10° - 50°C (14° - 122°F)	-25° - 50°C (-13° - 122°F)
125 KHZ ISO CARD & DUAL TECHNOLOGY ISO CARD	85.7mm x 54.0mm x 0.76 - 0.84mm	-35° - 50°C (-30° - 122°F)	-25° - 50°C (-13° - 122°F)
MIFARE KEYFOB	50.8mm x 31.5mm x 9.5mm	-25° - 55°C (-13° - 131°F)	-25° - 55°C (-13° - 122°F)
125 KHZ KEYFOB EPOXY (BLACK)	45mm x 30mm x 1.6mm	-40° - 95°C (-40° - 203°F)	-40° - 85°C (-40° - 185°F)
125 KHZ CLAMSHELL CARD	85.7mm x 54.0mm x 1.7mm	-10° - 50°C (14° - 122°F)	-25° - 50°C (-13° - 122°F)
TIRIS CARD	85.7mm x 54.0mm x 1.3mm	-10° - 50°C (14° - 122°F)	-40° - 100°C (-40° - 212°F)
TIRIS KEYRING	44mm x 6mm	-25° - 85°C (-13° - 185°F)	-40° - 100°C (-40° - 212°F)
MAGSTRIPE CARD	85.7mm x 54.0mm x 0.76mm		+ 5° - 30°C (41° - 86°F)

	Security	Cost	Interoperability	Flexibility	Read Range
Mifare Classic	Med	Low	High	Med	Med
Mifare DESFire EV1	High	High	Med	High	Low
Mifare Plus	High	Med	Med	Med	Low
125kHz	Low	Low	Low	Low	High

Cards	Punchable	ISO Thickness	Dye-Sublimation Printing
Mifare Classic Card (1K) C196350	✓		✓
Mifare Classic Card (4K) C196330	✓		✓
Mifare Classic Card (1K) C196310	x	✓	✓
Mifare Plus Card (4K) X Type C297274	x	✓	✓
Mifare Plus Card (2K) S Type C297172	x	✓	✓
Mifare Plus Card (2K) X Type C297272	x	✓	✓
Mifare Plus Card (4K) S Type C297174	x	✓	✓
Mifare DESFire Card (2K) EV1 C297372	x	✓	✓
Mifare DESFire Card (4K) EV1 C297374	x	✓	✓
Mifare DESFire Card (8K) EV1 C297378	x	✓	✓
125 kHz Series Prox Card C196450	✓		✓
125 kHz Clamshell Card C196410	x	x	x
TIRIS 1.3mm Card C196100	x	x	x
Ultracard PVC Hi-Co Magstripe Card C870560	✓		✓
Mifare Classic Prox Magstripe Card (1K) C196370	✓		✓
Mifare Classic Prox Magstripe Card (4K) C196340	✓		✓
125 kHz Prox Magstripe Card C196470	✓		✓
125 kHz / Mifare 1K Card C196430	x	✓	✓
125 kHz Series Prox Clamshell Card (4K) C196490	x	x	x

Product	Dimensions (Length x Width x Depth)	Temperature Range	Power (Not supplied by Gallagher)	Communications
GALLAGHER ENCODER (TIRIS)	190mm x 134mm x 54mm	-10° - + 55°C	12.5 V DC 250 mA	RS232
GALLAGHER MIFARE USB ENCODER	118mm x 78mm x 22mm	0° - 50°C		USB
GALLAGHER ENCODER (125 KHZ)	190mm x 134mm x 54mm	-0° - 50°C	13.6 V DC + or -15% 250 mA	RS 232

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