

The ICT Proximity Key Tag provides a complete multi technology smart RFID solution. Available with 125kHz or 13.56MHz technology, or as a multi technology tag combining both, it delivers maximum compatibility while providing a path forward to the latest technology.

An extremely durable compact design offers the ultimate in reliability and convenience, while the IP68 rating means these tags are resistant to heat, pressure and chemicals, making them suitable for the harshest environments.

## Feature Highlights

- > Utilizes highly secure 13.56MHz MIFARE DESFire EV2 smart card technology
- Mutual authentication, AES 128, DES and triple-DES data encryption with unique 56-bit serial number
- > Open solution with read / write functionality
- > Improve security of existing 125kHz applications with dual technology transition cards
- > Overmolded design prevents access to the tag's components
- > Laser engraved tag identification
- > Environmental rating of IP68 ensures maximum durability

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#### MIFARE DESFire

Designed for a diverse range of applications that demand the highest levels of security, MIFARE DESFire EV2 is based on open global standards for both RF interface and cryptographic methods.

The highly secure micro controller-based solution is certified with Common Criteria EAL5+. It features an on-chip backup management system and mutual three pass authentication, allowing it to hold unlimited applications and 32 files per application.

#### ICT Secured MIFARE

ICT Secured MIFARE is ICT's implementation of the MIFARE standard. Tag data is protected with a diversified authentication key and encrypted with an AES256 algorithm, effectively plugging the known security flaw in the MIFARE standard.

Other MIFARE formats are also available

### 125kHz Technology

125kHz technology offers a lower level of security but a good read range and short read time due to the lower power requirement and the small amount of data being transmitted. This allows users to simply present, swipe or wave their card in the general direction of the reader to achieve a successful read.

#### Convenient

The thin, compact design allows the tag to be carried in a wallet or purse, or easily attached to a keyring. Use with a lanyard or strap clip for maximum accessibility.

## Long Life and Durability

An extremely durable compact design offers the ultimate in reliability and convenience, while the IP68 rating means tags are resistant to water, heat, pressure and chemicals, making them suitable for the harshest environments.

## **Ideal Migration Solution**

Migration from legacy and less secure low frequency 125kHz technology can be easily achieved using dual technology MIFARE tags that incorporate both high and low frequency tag inlays. This provides backwards compatibility with existing solutions and allows organizations to transition to smart readers at their own pace.

Support for a number of low frequency products is available.

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# **Technical Specifications**

	MIFARE DESFire EV2	MIFARE	MIFARE / 125kHz HID	125kHz				
Ordering Code	PRX-TAG-DF	PRX-TAG-MF-B PRX-TAG-MF-W	PRX-TAG-MF-HID	PRX-TAG-LF				
Technology								
MIFARE DESFire	<b>⊘</b>	8	8	8				
MIFARE	8	<b>Ø</b>	<b>⊘</b>	8				
125kHz	8	8	<b>Ø</b>	<b>②</b>				
Operating Frequency								
13.56MHz	<b>②</b>	<b>Ø</b>	<b>Ø</b>	8				
125kHz	8	8	<b>Ø</b>	<b>Ø</b>				
EEPROM Memory								
Memory	2KB	1KB	1KB	363 Bits				
Number of Applications	Unlimited	N/A	N/A	N/A				
Files per Application	32	N/A	N/A	N/A				
Number of Sectors	N/A	16	16	N/A				
Write Endurance	500,000	200,000	200,000	100,000				
Communications								
RF Interface	ISO/IEC 14443A-4	ISO/IEC 14443A-3	ISO/IEC 14443A-3	ISO/IEC 11784/11785				
Baud Rate	848 kbit/s	106 kbit/s	106 kbit/s	106 kbit/s				
Typical Maximum Read Range *	6mm (0.23")	30mm (1.2")	30mm (1.2")	25mm (0.98")				
Common Criteria Certification								
Compliance	EAL5+	8	8	8				
Features								
Tag Construction	Thin PA6 overmolded plastic							
Tag Marking	Laser engraving (optional)							
Programming	Factory or field							
Dimensions								
Dimensions	45 x 30 x 2.4 mm (1.77 x 1.18 x 0.093")							
Weight	3g (0.10oz)							
Operating Conditions								
Operating Temperature	-40° to 85°C (-40° to 185°F)							
Storage Temperature	-35° to 85°C (-31° to 185°F)							
Environmental Rating	IP68							

 $<sup>^*\, \</sup>text{Read range is dependent upon reader technology and installation conditions and may vary accordingly}.$ 

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