



## ICT Wireless 433MHz Transmitter



The ICT Wireless 433MHz Transmitter is designed for long range wireless access control of garage doors or sliding gates. Each transmitter is compatible with most electronic access control systems, can function as a personal alarm device, and optionally comes with built-in proximity tag for standard door access. This high quality transmitter is hermetically sealed to protect against water and foreign substances. Delivering an impressive read range up to 200m (656ft) in open environments, it offers convenience and security with unmatched performance.

## Feature Highlights

- > Long range, up to 200m (656ft)
  - > 2 or 4 buttons with access control and personal alarm
  - > Conveniently attaches to a keyring or keychain
  - > Standard Wiegand output
  - > Rolling code prevents duplication
  - > Optional DESFire, Mifare or HID proximity for short range use
  - > Combine your access needs into one compact convenient device
  - > Hermetically sealed (waterproof)
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## Convenience and Security

The convenience of RF access control transmitters combined with the security of a personal alarm system.

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## Personal Alarm Device

With the installation of additional receivers in desired areas, the red button can be used as a personal alarm device. In the event of an emergency where someone presses the button, a nearby receiver will detect the signal and activate an alarm relay. This alarm relay can be used for annunciation or to activate a third party alarm system.

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## Short Range Proximity Options

Also available with an embedded DESFire, Mifare, HID or ICT format compatible proximity device, allowing the transmitter to be used on short range proximity readers for standard door access, eliminating the need to carry a separate access card.

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## Advanced Technology

Standard Wiegand output is compatible with most electronic access control systems when used alongside the ICT Wireless 433MHz Receiver. Rolling code prevents credential duplication.

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## MIFARE DESFire EV3

The latest addition to the MIFARE DESFire product family, MIFARE DESFire EV3 offers even more advanced hardware and software implementation on a brand new internal chip, and combines enhanced performance with a greater operating distance and improved transaction speed compared to its predecessors.

Based on global open standards for both air interface and cryptographic methods, it uses the same security certification level as IC products used for banking cards and electronic passports. Featuring an on-chip backup management system and mutual three-pass authentication, EV3 supports confidential and integrity-protected communication with secure dynamic messaging and mirroring.

- > Fully compliant with the international standard ISO/IEC 14443 Type A 1-4 and ISO/IEC 7816-4
- > Common Criteria EAL5+ security certified for IC hardware and software
- > NFC Forum Tag Type 4 certified
- > Secure, high speed command set
- > Unique 7-byte serial number
- > Choice of open DES/2K3DES/3K3DES/AES crypto algorithms
- > Open AES 128 bit crypto algorithm in hardware
- > Fully interoperable with existing NFC reader infrastructure
- > Transaction timer mitigates risk of man-in-the-middle attacks
- > Backwards compatible with all previous MIFARE DESFire generations

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## ICT Secured MIFARE

ICT Secured MIFARE is ICT's implementation of the MIFARE standard. Credential data is protected with a diversified authentication key and encrypted with an AES 256 algorithm, effectively plugging the known security flaw in the MIFARE standard.

*Other MIFARE formats are also available.*

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## 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 tag in the general direction of the reader to achieve a successful read.

## Technical Specifications

	Wireless 433MHz ICT Transmitter	Wireless 433MHz DESFire EV3 Transmitter	Wireless 433MHz MIFARE Transmitter	Wireless 433MHz HID26 Transmitter	Wireless 433MHz Transmitter
Ordering Information	RF-REM2-433-ICT RF-REM4-433-ICT	RF-REM2-433-DF-EV3 RF-REM4-433-DF-EV3	RF-REM2-433-MF RF-REM4-433-MF	RF-REM2-433-HID26 RF-REM4-433-HID26	RF-REM2-433 RF-REM4-433
<b>Technology</b>					
ICT Format	✓	✗	✗	✗	✗
MIFARE DESFire	✗	✓	✗	✗	✗
MIFARE	✗	✗	✓	✗	✗
125kHz	✗	✗	✗	✓	✗
433.92MHz	✓	✓	✓	✓	✓
<b>Features</b>					
Buttons	2 or 4				
Supply	CR2032 3V				
Battery Life	12 to 24 months				
Current Consumption	15mA				
Frequency	433.92MHz				
Output Code Combinations	10				
Rated E.R.P	58 to 100mW				
Read Range in Free Space	100 to 200m (328 to 656ft)				
<b>Dimensions</b>					
Dimensions	60 x 40 x 16 mm (2.36 x 1.57 x 0.62")				
Net Weight	Approx. 24g (0.8oz)				
Gross Weight	Variable packed qty.				
<b>Operating Conditions</b>					
Operating Temperature	-20° to 55°C (-4° to 131°F)				

The Wireless Transmitters require an RF-RCVR-433 Wireless 433MHz Receiver and are not compatible with other receivers.

## Regulatory Notices

### **RCM (Australian Communications and Media Authority (ACMA))**

This equipment carries the RCM label and complies with EMC and radio communications regulations of the Australian Communications and Media Authority (ACMA) governing the Australian and New Zealand (AS/NZS) communities.

### **CE – Compliance with European Union (EU)**

Conforms where applicable to European Union (EU) Low Voltage Directive (LVD) 2014/35/EU, Electromagnetic Compatibility (EMC) Directive 2014/30/EU, Radio Equipment Directive (RED) 2014/53/EU and RoHS Recast (RoHS2) Directive: 2011/65/EU + Amendment Directive (EU) 2015/863.

This equipment complies with the rules of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directives.

Security Grade 4, Environmental Class II, EN 50131-1:2006+A2:2017, EN 50131-3:2009, EN 50131-6:2008+A1:2014, EN 50131-10:2014, EN 50136-1:2012, EN 50136-2:2013, EN 60839-11-1:2013, Power frequency magnetic field immunity tests EN 61000-4-8, Readers Environmental Class: IVA, IK07.

### **Federal Communications Commission (FCC)**

FCC Rules and Regulations CFR 47, Part 15, Class A.

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; (2) This device must accept any interference received, including interference that may cause undesired operation.

### **Industry Canada**

ICES-003

This is a Class A digital device that meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (A)/NMB-3(A)

For a full regulatory and approval list please visit the ICT website.

Designers & manufacturers of integrated electronic access control, security and automation products.  
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[www.ict.co](http://www.ict.co)

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