



Advanced Card Systems Ltd.
Card & Reader Technologies

MIFARE[®] Wristband



Technical Specifications V1.01



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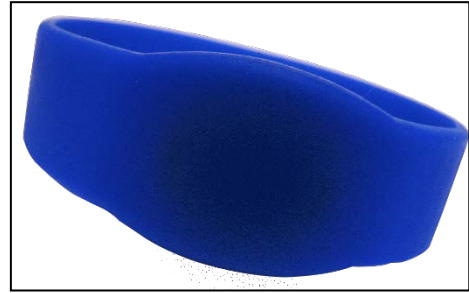


1.0. Introduction

MIFARE® Classic family is the pioneer and forerunner in contactless smart card ICs operating in 13.56 MHz frequency range with read/write capability. Being available in various forms, it is perfect for any contactless-based application.

MIFARE Wristband uses the RFID (Radio Frequency Identification) technology. It is made of durable silicone material making it resistant to liquids. These features make it ideal for any application requiring quick access, such as concerts, fitness centers and water theme parks.

MIFARE Wristband is made of silicone material that is acid and alkali-proof. It has low toxicity and chemical reactivity making it safe to be used by both children and adults. In addition, it is built to last due to its excellent resistance to various forms of radiation.





2.0. Features

- Built-in MIFARE Classic 1K chip
 - 1 KB EEPROM
 - Organized in 16 sectors with 4 blocks of 16 bytes each (one block consists of 16 bytes)
 - User definable access conditions to each memory block
 - Data retention: 10 years
 - Write endurance: 100,000 cycles
 - Features anti-collision
 - Mutual three pass authentication
 - Individual set of two keys per sector (per application) to support multi-application with key hierarchy
 - Unique serial number for each device (4 bytes)
- Conforms to ISO 14443 Type A Standard
- Material: Silicone
- Waterproof



3.0. Typical Applications

- e-Government
- e-Healthcare
- Access Control
- Network Security
- e-Purse & Loyalty
- Transportation



4.0. Technical Specifications

Embedded MIFARE Module

IC Type.....	MF1ICS50
Interface	ISO 14443 Type A
Protocol & Crypto	MIFARE Classic
Memory	1 KB EEPROM
Operating Frequency	13.56 MHz
Operating Distance	Up to 15 mm
Data Transfer	106 kilobits

Physical Specifications

Dimensions	65 mm/74 mm (diameter)
Color Options	Blue (also available in Yellow and Red)
Weight	15 g
Material	Silicone

Operating Conditions

Temperature.....	-40°C – 100°C
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