# FlexSmart® Series Credentials

MIFARE® Keyfob • 1434, 1444

Keyfob Flexibility and Convenience - Contemporary design enables easy attachment to a key, badge clip or badge lanyard.

Rugged, Double-Sealed Construction - Built to withstand harsh operating environments.

Customizable - Can be customized by adding a company logo.



## **ACCESS** interoperability.

The rugged HID MIFARE Keyfob is ideally suited for a variety of applications and environments. These include vacation resorts, health spas, apartment buildings, club houses, as well as commercial offices where photo IDs are not required. The RF-programmable keyfob features the high quality and security benefits customers appreciate in HID FlexSmart 13.56 MHz MIFARE credentials. The Keyfob permits the encoding of a wide range of data and information. Securely separated sectors, each protected by a set of two keys and programmable access conditions, allow complex applications and provide for future expansion.

Manufactured to the highest quality standards, HID FlexSmart MIFARE products have the memory structure and capacity to store multiple applications on a single credential. The data on the keyfob is protected with encryption keys used in the mutual authentication process. Therefore, no important data will be shared until the keyfob and reader have been authenticated to each other.

### **Key Features**

- ▶ High Security MIFARE technology ensures mutual authentication, data encryption and unique 32-bit serial number.
- ▶ Proven, Reliable Technology Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- ▶ Fast Processing and Data Communication Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.
- Multiple Memory Types Available in MIFARE IK and 4K.

## **Features**

#### Long Life

Passive, no-battery design allows for 100,000 read/write operations.

#### Rugged and Durable Design

Able to withstand harsh environments, the MIFARE® Keyfob® has double-sealed construction. Inner electronics are fully encapsulated in epoxy. Outer body is an ultra-sonic welded, polycarbonate material.

#### **Applications**

Designed for vacation resorts, health spas, apartment buildings, locker rooms, gated communities, vehicle fleet management, and corporate environments.

#### **Memory Specification**

IK Byte (8,192 bits) or 4K Bytes (32,768 bits)

Memory Sector 0 is used as the MIFARE® Application Directory (MAD)

- Unique 4 Byte (32 bit) ID per card (CSN)
- Each sector uses two encryption keys
- Key "A" to read only
- Key "B" to read/write
- Each encryption key is 6 Bytes (48 bits)

Dimensions	1.725" x 1.197" x 0.215" (4.38 cm x 3.04 cm x 0.55 cm)
Weight	0.191 oz. (5.4 g)
Typical Maximum Read Range*	Up to 2" (5.0 cm)
Operating Temperature	-40 to 158°F (-40 to 70°C)
<b>Operating Humidity</b>	5%-95% Non-condensing
<b>Operating Frequency</b>	13.56 MHz
RF Interface	ISO 14443 A, Parts 1-3
Transaction Time	< 100 ms
Baud Rate	106 kbps
Memory Type	EEPROM, IKbyte (8,192 bits) or 4 Kbytes (32,768 bits)
Multi-Application Memory	MIFARE 1K: memory arranged in 16 64-byte Sectors MIFARE 4K: memory arranged in 40 Sectors: 32 sectors of 64 bytes, 8 sectors of 256 bytes
Write Endurance	100,000 cycles min.
Data Retention	10 years min.
Material and Finish	Molded Polycarbonate, matte blue
Card Marking	Inkjet Standard, laser engraving optional
Custom Graphics	Optional
Slot Punch	Key Ring Hole
Programming	Factory or Field Programmable
Part Number	Model 1434 MIFARE 1K Keyfob Model 1444 MIFARE 4K Keyfob
Description	MIFARE Keyfob
Warranty	Lifetime - see Sales Policy for complete details

\*Dependent on local installation conditions.



**ACCESS** experience.

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