



The Software House MIFARE card leverages the proven, reliable contactless smart card technology that is deployed in over 300 million cards worldwide.

MIFARE technology utilizes an open architecture and provides robust encryption capabilities that make it an ideal solution for diverse applications such as access control, cashless vending, public transportation, airline ticketing, customer loyalty, and photo ID cards.

The Software House MIFARE card also utilizes an innovative SmartFrame™ technology that can be used with the suite of Software House Multi-Technology Readers to define the output length of the card data. This allows the customer the flexibility of specifying which bits they want to use for the card number.

KEY FEATURES

- 13.56 MHz operating frequency provides high-speed, reliable communications with high data integrity
- MIFARE technology ensures high security with mutual authentication, data encryption, unique 32-bit serial number
- Provides contactless access control with a read-range up to 10 cm (3.9 in)
- Meets ISO standards for thickness
- Image grade quality for direct image and thermal transfer printers

TECHNICAL SPECIFICATIONS

Typical Maximum

Read Range	Up to 10 cm (3.9 in), depending on local installation conditions
Card Dimensions	
Non-embeddable	5.4 x 8.6 x .076 cm (2.125 x 3.370 x .030 in)
Card Construction	Thin, flexible polyvinyl chloride (PVC) laminate
Operating Temperature	-25° to 70°C (-13° to 158°F)
Operating Frequency	13.56 MHz
RF Interface, as suggested by ISO/IEC	14443, Type A
Transaction Time	100 ms typical
Baud Rate	106 Kbaud
Memory Size	1 KB or 4 KB
Memory Type	EEPROM, read/write
Multi-Application Memory	16 sectors (for 1 KB)
Fixed Serial Number	Unique, 32 sectors, 32-bit (4 KB)
Write Endurance	Minimum 100,000 cycles
Keys	Read/write 48-bit

PART NUMBERS*

SWH-1ME	Non-programmed MIFARE Contactless Smart Card 1 KB (8192 bits) with 16 sectors
SWH-1MS	Software House standard programmed, MIFARE Contactless Card 1 KB (8192 bits) with 16 sectors; 26-bit or 37-bit
SWH-1MC	Custom programmed, MIFARE Contactless Smart Card 1 KB (8192 bits) with 16 sectors
SWH-4ME	Non-programmed MIFARE Contactless Smart Card 4 KB with 40 sectors
SWH-4MS	Software House standard programmed MIFARE Contactless Smart Card 4 KB with 40 sectors; 26-bit or 37-bit
SWH-4MC	Custom programmed MIFARE Contactless Smart Card 4 KB with 40 sectors

*See *Software Reader Program Card Ordering Guide*

found in the Member Center at www.swhouse.com/membercenter for additional details