MIFARE 1 S50 is a serial of non-contacting smart card that meets the standard of ISO/IEC 14443A. The communication layer (MIFARE RF interface) meets part 2 and 3 of the ISO/IEC 14443A standard. The security layer supports CRYPTO1 data stream encryption of domain authentication.

**MAIN FEATURES**

**MIFARE RF Interface (ISO/IEC 14443 A)**
- Non-Contacting data transmission and supplied power (no battery needed)
- Working distance: no more than 100mm (depends on the antenna dimension)
- Working frequency: 13.56 MHz
- High data transmission speed: 106 k bit/s
- Data integrity protection: 16 bit CRC, odd-even check, encoding and counting by bit.
- Anti-conflict
- Data transmission and processing time: < 100 ms (including backup and management time)

**EEPROM**
- 1 k byte (16 zones, 4 sections per zone, 16 bytes per section)
- User definable reading/writing condition for memory block
- Long time data storage: 10 years
- 100,000 writing times

**Security**
- Triple accreditation (ISO/IEC DIS 9798-2)
- Attack protective radio-frequency channel data encryption
- Two security keys (support multiple security levels) for each section
- Only one serial No. for one card
- Transmission security key to protect the access right of EEPROM during the transmission