



## 125KHz & 13.56MHz Dual Frequencies Magic Series Reader

### Design & Technologies

-  Read both low frequencies (125KHz) and high frequencies card; supported high frequency technologies are Legic, Mifare, Mifare Plus, DesFire or FuDan CPU).
-  Support on-site Reader Configuration Card to change certain parameters.
-  Number pad use "touching sensor", the latest technology and individual number backlit when touch.
-  Display Magic can provide customer a full series of choices
-  Display reader can display CSN/UID number or Programmed Card Number or user Name when the user card is present.\* **(Supported Multiple Languages)**
-  Tamper protection
-  Front plate customization and back lit design is available.
-  Design with End User logo is possible.
-  Door Bell function for Number pad reader.
-  Economical Mini Magic can be mullion mount.
-  OLED Display allow user to see the message clearly under direct sunlight.
-  A PIN can be set inside the card to authenticate with the reader so that "Card + PIN" mode can be implemented without relying on the controller.\*

### Friendly Installation

-  "Touch" number pad does not carry any moving parts, which implies more durable.
-  All weather proof design with IP65 certificate.
-  Metal back plate allows the reader install on metal surface and back-to back without affecting the read range.
-  Universal back plate allows the reader be installed on different size of gang box.
-  Non-drop bottom screw made servicing handier.
-  All input and output signals are protected against static charges.
-  Reverse power protection.
-  Stainless steel Security screw is an option
-  All inputs are 12Vdc protected.

**Model Number:** X<sub>1</sub> X<sub>2</sub> N<sub>1</sub> N<sub>2</sub> N<sub>3</sub> – N<sub>4</sub> X<sub>3</sub>

| RF Technologies               |                                                                           | Reader Appearance and Function |                                                                          |
|-------------------------------|---------------------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------|
| X <sub>1</sub> X <sub>2</sub> | HM = Mifare & 125KHz Technologies<br><br>HL = Legic & 125KHz Technologies | N <sub>1</sub>                 | 3 = Normal Reader ; 5 = Display Reader                                   |
|                               |                                                                           | N <sub>2</sub>                 | 2 = Normal Size<br>8 = Mini Size                                         |
|                               |                                                                           | N <sub>3</sub>                 | 2 = Read UID / Card Number<br>3 = Read Sector (Mifare) / Segment (Legic) |
|                               |                                                                           | N <sub>4</sub>                 | 3 = Terminal (for Display Reader)<br>8 = Pigtail                         |
|                               |                                                                           | X <sub>3</sub>                 | N = No Number pad; K = Number pad                                        |

| Model<br>Functions              | Standard & Mini Reader                                                                    | Keypad Reader             | Display Reader                                                                                                                  |
|---------------------------------|-------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Configurable Functions</b>   |                                                                                           |                           |                                                                                                                                 |
| Re-configure Window             | 5 seconds (Default) or Half an hour after Power up                                        |                           |                                                                                                                                 |
| Reader Output Format            | CSN/UID 32bits, 34bits, 56bits (backward/forward), file content reading for programmed ID |                           |                                                                                                                                 |
| Wiegand Plus Width              | Different choices to fit with different Controller's requirements                         |                           |                                                                                                                                 |
| Keypad Output                   | N/A                                                                                       | Definable                 | Definable                                                                                                                       |
| Buzzer Control                  | Reader & Controller control (Default) or Controller control only                          |                           |                                                                                                                                 |
| LED/Back lit Control            | Define different LED color response base on Green LED                                     |                           | N/A                                                                                                                             |
| Display Clock Synchronization.  | N/A                                                                                       | N/A                       | <ul style="list-style-type: none"> <li>H/W reset</li> <li>Via RS485 TimeSyn S/W</li> </ul>                                      |
| <b>Technical Specifications</b> |                                                                                           |                           |                                                                                                                                 |
| Typical Read range              | 3 – 5 cm                                                                                  |                           |                                                                                                                                 |
| Reader Standard Output          | Wiegand (RS232 & RS485 optional)                                                          |                           |                                                                                                                                 |
| Standard Keypad output          | N/A                                                                                       | Wiegand with 4 bits burst | Wiegand with 4 bits burst                                                                                                       |
| Display                         | N/A                                                                                       | N/A                       | OLED Display                                                                                                                    |
| Display Message                 | N/A                                                                                       | N/A                       | <ul style="list-style-type: none"> <li>Access Granted, Access Denied, Enter PIN;</li> <li>Time;</li> <li>Card Number</li> </ul> |
| Wiring Distance                 | 150m (22 AWG with shielded cable)                                                         |                           | 120m (22 AWG with shielded cable)                                                                                               |

**Operating Specification:**

|                           |                                        |
|---------------------------|----------------------------------------|
| Operating Voltage         | 10 - 15VDC                             |
| Operating Current         | 150mA (max)                            |
| Operating Temperature     | -30°C -70°C                            |
| Exterior dimension (Mini) | 115.5*84.5*20.5mm (84.05*54.05*16.5mm) |
| Case material             | PC+ABS                                 |
| Standard Color            | Black                                  |
| Operating Humidity        | 10% - 90%                              |
| Weight (Mini)             | 210g (160g)                            |

## **FCC Caution.**

### **§ 15.19 Labelling requirements.**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **§ 15.21 Information to user.**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **§ 15.105 Information to the user.**

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.