What is the EM card? EM card is one of RFID cards with an EM chip. Common EM card include EM4100 card, EM4200 card, EM4033 card, EM4023 card, EM4305, etc. EM4200 card that we recommend is a classical LF RFID card, working on 125KHZ. It has the characteristic of low consumption, low cost, higher reading range performances, and good compatibility. EM4200 125KHZ RFID Card is compatible with EM100/4102 and EM4005/4105 communication protocols.

### Parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>125 kHz RFID Blank Card</th>
<th>Color</th>
<th>Customizable</th>
<th>Working Temperature</th>
<th>-20°C to 65°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>PVC, PET</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chip</td>
<td>EM4100, EM4200</td>
<td>Crafts Available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>125 kHz</td>
<td>Reading Distance</td>
<td>0-10m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td>ISO18000-2</td>
<td>Write Endurance</td>
<td>100000 times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Retention Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Printing Options</td>
<td></td>
<td></td>
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<td>Printing Options</td>
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<td>Silk-screen printing, Laser Engraving, CMYK full color, Pantone, etc.</td>
</tr>
</tbody>
</table>

### Dimensional Diagram

- Covering material (PVC, PET)
- PVC
- COB+winding coil
- PVC
- Covering material (PVC, PET)

### Available chips

<table>
<thead>
<tr>
<th>Chip Name</th>
<th>Protocol</th>
<th>Capacity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>TK4100</td>
<td>ISO 11784/11785</td>
<td>64 bits</td>
<td>125 kHz</td>
</tr>
<tr>
<td>EM4200</td>
<td>ISO 11784/11785</td>
<td>128 bits</td>
<td>125 kHz</td>
</tr>
<tr>
<td>EM4305</td>
<td>ISO 11784/11785</td>
<td>512 bits</td>
<td>125 kHz</td>
</tr>
<tr>
<td>T5577</td>
<td>ISO 11784/11785</td>
<td>330 bits</td>
<td>125 kHz</td>
</tr>
</tbody>
</table>
Features

EM4200 card usually is made of PVC or PET, and the EM4200 chip determines the performance of the card. EM4200 chip is a CMOS integrated circuit intended for use in electronic Read Only RF transponders. It can replace EM4100/4102 chip and EM4005/4105 chip directly. Here are the features:

- Full compatible with EM4100/4102 and EM4005/4105 communication protocols.
- 28-bit laser programmed ROM (64 and 96-bit option available)
- Several resonant capacitor integrated on-chip (0pF, 75pF or 250pF mask option)
- 100 to 150 kHz frequency range
- Several options of data rate and data encoding:
  - Manchester 32 and 64 RF clocks per bit
  - Biphasic 32 and 64 RF clocks per bit
  - PSK 16 RF clocks per bit (subcarrier RF/2)
  - FSK 50RF clocks per bit

APPLICATIONS

EM4200 chip can be encapsulated into different forms, widely using in the following applications:

- Access Control
- Animal Identification according to ISO11785 (FDX-B)
- Waste management standard (BDE)
- Logistics automation
- Anti-counterfeiting
- Industrial transponder

Packaging and shipping

| Volume          | Chip Card: 200pcs cards with chips in one box, 2000/3000pcs per carton
|                | Common Card: 250pcs per box, 2500/3000pcs per carton
|                | Inkjet White Card: 230pcs per box, 3450pcs per carton
| Weight         | Chip Card: 6.5KG for 1000pcs
|                | Common Card: 6.0KG for 1000pcs
| Carton Size    | 49*23*16CM (for 2000/2500pcs)
|                | 49*23*20CM (for 3000pcs)
|                | Special demands for packing available.
| Delivery Time  | Generally, 3 days for DHL/FedEx/UPS, 10 days for air shipping, 18 days for sea shipping.
| Shipping       | DHL/TNT/FEDEX/UPS By Air / Sea or as required

As a card, EM4200&EM4100 125KHZ RFID Card is mainly used in the access control for community, company, school, library, exhibition, parking lot, etc.