



## Alien® Higgs® 4 RFID Card

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|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKU:          | RS-H4-CR80                                                                                                                                                                                                        |
| Chip Type:    | Alien® Higgs® 4                                                                                                                                                                                                   |
| Frequency:    | UHF 840-960 MHz                                                                                                                                                                                                   |
| Protocol:     | ISO/IEC 18000-63, EPC Class 1 Gen 2                                                                                                                                                                               |
| User Memory:  | 128 bits                                                                                                                                                                                                          |
| EPC Memory:   | 128 bits                                                                                                                                                                                                          |
| UID Memory:   | 64 bits                                                                                                                                                                                                           |
| Read Range:   | Up to 11 m                                                                                                                                                                                                        |
| Industry:     | Access Control, Events, Transportation                                                                                                                                                                            |
| Applications: | Public Transportation, Event Ticketing, Loyalty System, Retail Item Level Tagging, Product Authentication, Supply Chain Management, Asset Inventory and Tracking, Vehicle Tracking, Baggage Handling and Tracking |

The Alien® Higgs® 4 CR80 RFID Card combines durable PVC construction with high-performance UHF technology, delivering reliable identification across multiple applications. Sized to CR80 standards, these cards support both blank and customized printing, making them compatible with most direct thermal and thermal transfer card printers. Fully compliant with EPC Class 1 Gen 2 specifications, Higgs® 4 is among the highest-performing RFID ICs on the market, ideal for retail item-level tagging, product authentication, and supply chain management.

Built for versatility and efficiency, the Higgs® 4 CR80 card ensures accurate encoding and fast read/write cycles, even in high-volume operations. Its robust serialization and anti-collision capabilities allow multiple cards to be processed simultaneously, simplifying inventory, asset tracking, vehicle identification, and baggage handling. Flexible printing options and professional-grade performance make this card a reliable solution for businesses requiring scalable, long-lasting UHF RFID deployments.

|                      |                                             |                                                                                                                              |
|----------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Physical Information | Material                                    | Black Core PVC, White Core PVC, White Core PET (WEEE Directive✓), White Core ABS (WEEE Directive✓), Wooden (WEEE Directive✓) |
|                      | Card Size                                   | 86×54×0.88 mm (3.4"×2.2")                                                                                                    |
|                      | Operating Environment                       | -20°C~+50°C, 20%~80% RH                                                                                                      |
|                      | Storage Environment                         | +18°C~+28°C, 20%~90% RH                                                                                                      |
|                      | Surface Treatment                           | Glossy, Matte or Frosted                                                                                                     |
|                      | Personalized Printing (NA For Wooden Cards) | Thermal Transfer/Dye Sublimation                                                                                             |
|                      | Customization Options (NA For Wooden Cards) | Pre-Printing, Barcode Printing, Embossing, Holograms, Signature Panels, UV Printing, Hot Stamping, Punch Holes               |
|                      | Care Tips                                   | 1. Avoid excessive bending<br>2. Keep away from water<br>3. Store in cool and dry place                                      |
| Cleaning Tips        |                                             | 1. Use a soft, dry cloth<br>2. Avoid harsh chemicals or abrasive cleaners<br>3. Remove stains immediately                    |

|                       |                               |                                     |
|-----------------------|-------------------------------|-------------------------------------|
| Technical Information | Operating Frequency           | 860-960 MHz                         |
|                       | Communication Protocol        | ISO/IEC 18000-63, EPC Class 1 Gen 2 |
|                       | Chip Type                     | Alien® Higgs® 4                     |
|                       | User Memory                   | 128 bits                            |
|                       | EPC Memory                    | 128 bits                            |
|                       | UID Memory                    | 64 bits                             |
|                       | Operating Distance            | Up to 11 m                          |
|                       | Encoding Rates                | 3600 tags/minute                    |
|                       | Write Endurance               | 100,000 times                       |
|                       | Data Retention                | 50 years                            |
|                       | Anti-Cloning/Anti-Counterfeit | Support                             |
|                       | Security Feature              | 32 bit Password                     |

|                       |                  |                                                                             |
|-----------------------|------------------|-----------------------------------------------------------------------------|
| Packaging Information | Packing Format   | Single pieces, piece by piece                                               |
|                       | Packing Quantity | 200 pcs/case, G.W. : 1.3 kg                                                 |
|                       | Packing Method   | 1000 pcs or 2000 pcs/carton                                                 |
|                       | Carton Dimension | 1000 pcs: 23×20×17 cm (G.W.: 7 KG);<br>2000 pcs: 48×23×14 cm (G.W.: 13 KG). |

● **Performance and Illustrations:** Graphs and visuals are for reference only; actual product performance may vary depending on usage and environment. 
 ● **Storage and Handling Guidelines:** Follow standard ESD-safe storage and handling procedures to maintain product integrity and avoid damage. 
 ● **Product Updates and Revisions:** [rfidbridge.com](https://www.rfidbridge.com) may change products, specs, or services at any time without prior notice. 
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