## Advantages of RBH 50-bit and 64-bit card formats over a generic 26-bit card format

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| 255 65,535 |
| Site (Facility) Codes Possible |


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| 65,535 4,294,967,295 over 4 billion |  |
| Card numbers per site code |  |



RBH 50 \& 64-bit formats allow for $\mathbf{2 8 1}$ trillion unique card numbers

| Format | 26 Bit | RBH 50 Bit | RBH 64 Bit |
| ---: | :---: | :---: | :---: |
| Type | Generic | Secure | Secure |
| Compatibility | HID or AWID | AWID | HID |
| Can order duplicates | Yes | No | No |
| Unique | No | Yes | Yes |
| Need to custom order specific site codes | Yes | No | No |
| Need to keep track of card numbers | Yes | No | No |
| Available through many sources | Yes (All) | Yes (Select) | No (Select) |
| Site (Facility) Codes Possible | 255 | 65,535 | 65,535 |
| Card numbers per site code | 65,535 | $4,294,967,295$ | $4,294,967,295$ |
| Unique credentials possible | $16,711,425$ | $281,470,681,677,825$ |  |

## How many 26-bit duplicates are out there?

Law suites were filed due to security breaches caused by 26-bit duplicate cards Low numbers are repeated more often and usually given to VIPs

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| Unique 26-bit cards | NY State Population | US Population | 26-bit cards produced |
| $16,777,216$ | $18,976,457$ | $307,006,550$ | $500,000,000+$ |
| 17 million | 19 million | $\mathbf{3 0 7}$ million | Over 500 million |

