**Access controller API interface--wiegand input format**

SECURITY TIP:

This protocol is a confidential document . Please do not copy or send to others without permission.

If you can not maintain doc. Security, please delete it.

# **Introduction**

We can define controller’s wiegand input format.

1. Given reader type
2. Given data’s verification algorithm or not verify it.
3. Can limit some cards
4. Card no. Reverse output

This file is used for new CPU: Cloud+ controller, cloud 2 door, cloud 4 door, turnstile, single door, Embedded controller.

Software sents http instruction to controller and controller respond.

Instruction address is controller IP, +URL, port of fixed 80

|  |  |  |  |
| --- | --- | --- | --- |
| **Function** | **Type** | **Instruction** | **Explanation** |
| **Get config** | GET | http://192.168.0.131/HttpApi.xml?Cmd=GetWGFormat | Get all configs inside device |
| **Save config** | POST | http://192.168.0.131/SaveWGFormat | Save config into device |
| **Reset** | GET | http://192.168.0.131/HttpApi.xml?Cmd=ResetWGFormat | Reset--back to device default config |

Note: fixed 10 configs, get and save config will have all 10 together every time.

**1 Get config** http://192.168.0.131/HttpApi.xml?Cmd=GetWGFormat

**Function**：Get all configs from device

**Software sends**

GET http://192.168.0.131/HttpApi.xml?Cmd=GetWGFormat HTTP/1.1

Host:192.168.1.230:84

Content-Type: application/json

**Controller respond**

HTTP/1.1 200 OK

User-Agent: Chrome/61.0.3163.100 Safari/537.36

Cache-Control: no-cache

Content-Type: application/json

Content-Length:1055

{"err\_code":"0","message":"",

"Enable":[1,1,1,1,1,0,0,0,0,0],

"Len":[26,34,35,37,66,0,0,0,0,0],

"OddParity":[1,1,0,0,1,0,0,0,0,0],

"EvenParity":[26,34,0,0,66,0,0,0,0,0],

"CheckOdd":[1,1,0,0,1,0,0,0,0,0],

"CheckEven":[1,1,0,0,1,0,0,0,0,0],

"FacCode":[0,0,0,0,0,0,0,0,0,0],

"ByteDir":[0,0,0,0,0,0,0,0,0,0],

"IncFac":[0,0,0,0,0,0,0,0,0,0],

"OddMask":["00000000000000001FFE","0000000000000001FFFE","00000000000000000000",

"00000000000000000000","000000000001FFFFFFFE","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"],

"EvenMask":["00000000000001FFE000","000000000001FFFE0000","00000000000000000000",

"00000000000000000000","0001FFFFFFFE00000000","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"],

"CardMask":["0000000000000001FFFE","000000000001FFFFFFFE","0000000000000001FFFE",

"0000000000000001FFFE","0001FFFFFFFFFFFFFFFE","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"]}

Field explanation, each field has the same number group length of 10

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Explanation** |
| Enable | UInt8 | Each config enable or not, 1 Enable, 0 Disable |
| Len | UInt8 | Reader data length: data bit from reader like 26 or 34 |
| OddParity | UInt8 | Position of odd parity value，start from 1 |
| EvenParity | UInt8 | Position of even parity value, start from 1 |
| CheckOdd | UInt8 | Enable odd parity or not, 1 Enable, 0 disable |
| CheckEven | UInt8 | Enable even parity value, 1 Enable, 0 disable |
| FacCode | UInt8 | Show facility code or not, 0 not show facility code, or card’s facility code will be proceeded as the same as this value (only for 26/34) |
| ByteDir | UInt8 | Card no. Output sequence,0 default, 1 revers order by byte, 2 reverse order by half byte |
| IncFac | UInt8 | output card no. Incude facility code or not, default include, 1 include, 0 not contain |
| OddMask | Hex | Hexadecimal character string,Mask of all bits involved in odd parity, position of 1 involved in check |
| EvenMask | Hex | Hexadecimal character string,Mask of all bits involved in even parity, position of 1 involved in check |
| CardMask | Hex | Hexadecimal character string, card no.’s mask,position of 1 involved in check |

**2 Reset config** <http://192.168.0.131/HttpApi.xml?Cmd=ResetWGFormat>

Function:Reset config to device default config.

**Software sends**

GET /HttpApi.xml?Cmd=ResetWGFormat HTTP/1.1

Content-Type: application/json

Host: 192.168.0.131

Connection: Keep-Alive

**Controller answer**

HTTP/1.1 200 OK

User-Agent: Chrome/61.0.3163.100 Safari/537.36

Cache-Control: no-cache

Content-Type: application/json

Content-Length:29

{"err\_code":"0","message":""}

**3 Store config** http://192.168.0.131/SaveWGFormat

Function:Store config parameters into device

**Software sends**

POST /SaveWGFormat HTTP/1.1

Content-Type: application/json

Host: 192.168.0.131

Content-Length: 1027

Expect: 100-continue

{"EvenParity":[26,34,0,0,66,0,0,0,0,0],

"ByteDir":[0,0,0,0,0,0,0,0,0,0],

"Enable":[1,1,1,1,1,0,0,0,0,0],

"EvenMask":["00000000000001FFE000","000000000001FFFE0000","00000000000000000000",

"00000000000000000000","0001FFFFFFFE00000000","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"],

"CheckOdd":[1,1,0,0,1,0,0,0,0,0],

"CheckEven":[1,1,0,0,1,0,0,0,0,0],

"IncFac":[1,1,1,1,1,0,0,0,0,0],

"OddMask":["00000000000000001FFE","0000000000000001FFFE","00000000000000000000",

"00000000000000000000","000000000001FFFFFFFE","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"],

"CardMask":["00000000000001FFFFFE","000000000001FFFFFFFE","0000000000000001FFFE",

"0000000000000001FFFE","0001FFFFFFFFFFFFFFFE","00000000000000000000","00000000000000000000",

"00000000000000000000","00000000000000000000","00000000000000000000"],

"FacCode":[0,0,0,0,0,0,0,0,0,0],

"OddParity":[1,1,0,0,1,0,0,0,0,0],

"Len":[26,34,35,37,66,0,0,0,0,0]}

**Controller answers**

HTTP/1.1 200 OK

User-Agent: Chrome/61.0.3163.100 Safari/537.36

Cache-Control: no-cache

Content-Type: application/json

Content-Length:29

{"err\_code":"0","message":""}

See front “get instruction explanation” for field description

THE END