



# Milesight AI ToF People Counting Sensor

## API Specification

Update Time	Applicable Firmware version	Description
2023-09-27	V_133.1.0.4	Dwell time, Heat Map feature, etc.
2023-10-12	V_133.1.0.4-r1	Group counting, exhibition mode, etc.
2023-11-29	V_133.1.0.5	Video validation and etc.
2024-02-22	V133_1.0.5-r4	Confidence adjustment, playback setting
2024-04-19	VS13x_1.0.6	Shopping cart detection, LLDP, validation setting update, DO configuration update, etc.
2024-07-18	VS133_1.0.7	Tailgating Detection, OpenVPN, BACnet Object, 802.1x update, Live Preview Interface update
2024-08-06	VS135_1.0.7	Wi-Fi setting, Multi-Devices update

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# Overview

This document specifies the parameters and configuration files for Milesight AI ToF People Counting Sensor VS13x.

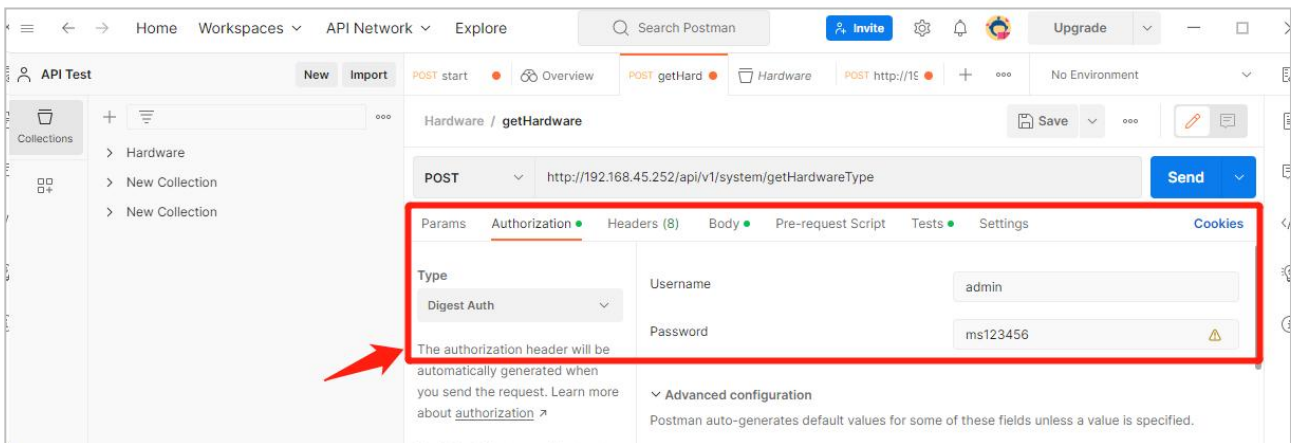
## Permission level

The permission levels column in each parameter table shows the required permission level to operate parameters.

To be able to perform an action on a parameter the user needs to have a permission level equal to or higher than the corresponding permission level of the parameter.

Security level	Description
Admin	Top access right.

Each API call needs to be accompanied with **Digest Authentication** as the following picture shows.



# 1. Dashboard

## 1.1 Live Preview Interface (websocket)

### Request URL:

<http://192.168.5.220:80/counting/frame/>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
enable	boolean	Yes	
playMode	number	Yes	0: Video stream 1: Static images 2: No image
imageType	number	Yes	0: gray, 1: dist

### Return JSON parameter description:

Parameter	Types	Description
action	string	"transmit": automatic posting
tofLightStatus	string	Current ToF light status
message	string	"frame": image frame "result": live view "track": tracking lines
alarmInfo	object[]	
even	integer	0: Tailgating
detectLine	integer	DETECT_LINE_1 = 0, DETECT_LINE_2 = 1, DETECT_LINE_3 = 2, DETECT_LINE_4 = 3,
alarmTime	string	Time to alarm
result	object	

areas	object[]	people in/out counts from different areas
enter	number	In count
leave	number	Out count
childrenEnter	number	Children in count
childrenLeave	number	Children out count
staffEnter	number	Staff in count
staffLeave	number	Staff out count
line	number	The ID of detection line
groupEnter	number	Group in count
groupLeave	number	Group out count
alarmIn	number	External digital input
timestamp	number	The timestamp of the count
regionCounting	object[]	
index	number	
totalCount	number	Region total counts
staffCount	number	Staff counts
childrenCount	number	Children counts
dwelDetect	object[]	
index	string	
dwelMax	string	
dwelAvg	string	
staffDwellMax	string	
staffDwellAvg	string	
childrenDwellMax	string	
childrenDwellAvg	string	
status	number	0: Success Other value: Fail
tracks	object[]	
human	number	0: not the people 1: people
target	Array[]	"target":[[100,120],[100,120]]
personnelType	number	0: Adult 1: staff 2: Child
cartStatus	number	1: empty, 2: partial load, 3: full
height	integer	Unit: mm

**Request Example:**

```
{
```

```

"enable": true,
"playMode": 1,
"imageType": 1
}

```

## 1.2 Get Preview Image Parameters

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/getFrameParams
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	No	Order number
data	object	No	Return data
osdEnable	boolean	No	
playMode	number	Yes	
type	string	No	
withTracks	boolean	Yes	
detectionLinesEnable	boolean	Yes	
detectionRegionEnable	boolean	Yes	
uturnAreasEnable	boolean	Yes	
grayConfigurable	boolean	Yes	
shoppingCartEnable	boolean	Yes	
detail	string	No	Return Information
status	number	No	Status Value 0: Success
transmit_cast	number	No	Processing time

### Return Example:

```

{
  "command": 115,
  "data": {
    "detectionLinesEnable": true,

```



```

    "detectionRegionsEnable": true,
    "grayConfigurable": false,
    "osdEnable": true,
    "playMode": 1,
    "shoppingCartEnable": true,
    "type": "dist",
    "uturnAreasEnable": true,
    "withTracks": true
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}

```

### 1.3 Set Preview Image Parameters

#### Request URL:

<http://192.168.5.220:80/api/v1/counting/setFrameParams>

#### Request Method:

post method

#### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
withTracks	Yes	boolean	True: Tracking Line On False: Tracking Line Off
type	No	string	dist: depth color mode gray: gray mode
playMode	Yes	number	0:Video Stream 1:Static Images 2:No Image
detectionLinesEnable	Yes	boolean	
detectionRegionsEnable	Yes	boolean	
uturnAreasEnable	Yes	boolean	

shoppingCartEnable	Yes	boolean	
--------------------	-----	---------	--

**Request Example:**

```
{
  "detectionLinesEnable": true,
  "detectionRegionsEnable": false,
  "playMode": 0,
  "shoppingCartEnable": true,
  "type": "dist",
  "uturnAreasEnable": true,
  "withTracks": true
}
```

**Request Example:**

```
{
  "command": 116,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}
```

## 1.4 Get Web Display

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getWebDisplay>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
lineParam	object[]	Item type: object
includeChild	boolean	

includeStaff	boolean	
showCapacity	boolean	Whether to enable the capacity display
line	number	
regionParam	object[]	Item type: object
includeChild	boolean	
includeStaff	boolean	
index	number	
detail	string	
status	number	
transmit_cast	number	

**Return Content Example:**

```
{
  "command" : 9,
  "data" : {
    "lineParam" : [
      {
        "includeChild" : false,
        "includeStaff" : false,
        "line" : 1,
        "showCapacity" : false
      },
      {
        "includeChild" : false,
        "includeStaff" : false,
        "line" : 2,
        "showCapacity" : true
      },
      {
        "includeChild" : true,
        "includeStaff" : true,
        "line" : 3,
        "showCapacity" : true
      },
      {
        "includeChild" : true,
        "includeStaff" : true,
        "line" : 4,
        "showCapacity" : true
      }
    ]
  }
}
```

```
],  
  "regionParam" : [  
    {  
      "includeChild" : true,  
      "includeStaff" : true,  
      "index" : 0  
    },  
    {  
      "includeChild" : false,  
      "includeStaff" : false,  
      "index" : 1  
    },  
    {  
      "includeChild" : false,  
      "includeStaff" : false,  
      "index" : 2  
    },  
    {  
      "includeChild" : true,  
      "includeStaff" : false,  
      "index" : 3  
    }  
  ]  
},  
"detail" : "ok",  
"status" : 0,  
"transmit_cast" : 2  
}
```

## 1.5 Set Web Display

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/setWebDisplay
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Required	Types	Description
lineParam	Yes	object[]	Item type: object
includeChild	Yes	boolean	
includeStaff	Yes	boolean	
line	Yes	number	
showCapacity	Yes	boolean	
regionParam	Yes	object[]	Item type: object
includeChild	Yes	boolean	
includeStaff	Yes	boolean	
index	Yes	number	

## Return JSON parameter description:

Parameter	Types	Description
detail	string	
status	string	

## Return Content Example:

```
{
  "command" : 10,
  "detail" : "error:Invalid request field",
  "status" : -1,
  "transmit_cast" : 0
}
```

## 2. Rule

### 2.1 Get one ToF Image

## Request URL:

```
http://192.168.5.220:80/api/v1/counting/getImage
```

## Request Method:

```
post method
```

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Required	Types	Description
type	Must	string	Type of image "dist": depth image
colored	Must	boolean	true: get pseudo-colour image false: get raw image

**Request Example:**

```
{
  "type": "dist",
  "colored": true
}
```

**Return JSON parameter description:**

Parameter	Types	Description
status	number	Status Value 0: Success
detail	string	Return Information
data	object	Image data
dist	string	The base64 string of the depth map
height	number	
type	number	Image type, 1: U8C1; 2: U16C1; 16:U8C3;
width	number	

**Return Example:**

```
{
  "data": {
    "dist": "data:image/jpeg;base64,/9j/4AAQSkZJR.....FFf/Z",
    "height": 196,
    "type": 2,
    "width": 300
  },
  "detail": "ok",
  "status": 0
  "transmit_cast": 49
}
```

## 2.2 Get People Counting Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/getAlgoParams>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	No	
data	object	No	
areas	object	No	
detectLines	Array[]	No	
lineNames	String[]	Yes	
lineUuids	String[]	No	
uturnArea	Array[]	No	
enable	boolean	Yes	
deploy	object	No	Installation Information
angle	number	No	
height	string	No	Height of installation
regionCounting	object	No	
enable	boolean	No	
regionParam	object[]	No	
coordinate	object[]	No	
x	number	Yes	
y	number	Yes	
dwellDetectEnable	boolean	No	
index	number	No	
minDwellTime	number	No	
passByFiltering	number	No	
regionCountingEnable	boolean	No	
regionName	string	No	

childrenFilterEnable	boolean	No	
childrenFilterThreshold	number	No	
staffIdentifyEnable	boolean	No	
staffIdentifyThreshold	number	No	
staffDetectSens	number	No	
targets	object	No	Height range of targets
maxHeight	number	No	Maximum height
minHeight	number	No	Minimum height
trackMode	number	No	
detectionMode	integer	No	0: disable, 1: enable
uturnEnable	boolean	No	
heatmapEnable	boolean	No	
resetCumulativeInfo	object	Yes	
enable	boolean	Yes	
wDay	integer	Yes	0~6: Sunday to Saturday 7: Everyday
time	integer	Yes	Unit: second
groupCountingEnable	boolean	No	
groupCountingNumMax	number	No	
shoppingCartDetectEn	boolean	No	
maxCartBasketHeight	number	No	
miniCartBasketHeight	number	No	
detail	string	No	
status	number	No	
transmit_cast	number	No	

**Return Example:**

```
{
  "command": 104,
  "data": {
    "areas": {
      "detectLines": [
        [
          [89,98],
          [87,194]
        ],
        [
          [218,101],
```



```
[99,98]
],
[
  [225,188],
  [231,98]
],
[
  [99,187],
  [207,188]
]
],
"lineNames": [
  "Door 1",
  "Door 2",
  "Door 3",
  "Door 4"
],
"lineUids": [
  "00000000-aa46-901a-1597-7c24100b4ba16e17",
  "00000001-a6a5-58ff-e13d-d882a3a65a68af88",
  "c3c568ba-8df6-49f6-8c47-57d6cb51c249",
  "19db6f7e-35e0-4cd3-a2a4-340de15c7096"
],
"uturnArea": [
  [
    [76,196],
    [96,196],
    [102,96],
    [72, 98]
  ],
  [
    [101,104],
    [218,115],
    [227,88],
    [99,84]
  ],
  [
    [212,187],
    [252,194],
```

```
[249,98],
[220,96]
],
[
[97,175],
[209,177],
[212,210],
[94,202]
]
],
},
"childrenFilterEnable": true,
"childrenFilterThreshold": 1300,
"deploy": {
  "angle": 0,
  "height": 3239
},
"detectionMode": 0,
"groupCountingEnable": false,
"groupCountingNumMax": 20,
"heatmapEnable": false,
"maxCartBasketHeight": 750,
"miniCartBasketHeight": 450,
"regionCounting": {
  "enable": false,
  "regionParam": []
},
"resetCumulativeInfo": {
  "enable": false,
  "time": 0,
  "wDay": 7
},
"shoppingCartDetectEn": true,
"staffDetectSens": 5,
"staffIdentifyEnable": false,
"staffIdentifyThreshold": 500,
"targets": {
  "maxHeight": 2900,
  "minHeight": 1000
}
```

```

    },
    "trackMode": 1,
    "uturnEnable": true
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 5
}

```

## 2.3 Set People Counting Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/setAlgoParams>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Description
deploy	object	No	
angle	string	No	Installation angle(float)
height	number	yes	Installation Height
targets	object	No	
maxHeight	number	yes	Maximum target height
minHeight	number	yes	Minimum target height
areas	object	No	
enable	boolean	No	True: enable, False: disable
detectLines	Array[]	No	
uturnArea	Array[]	No	
LineNames	String[]	No	
uturnEnable	boolean	No	True: enable, False: disable
childrenFilterEnable	boolean	No	True: enable, False: disable
childrenFilterThreshold	number	No	Default value is 1300,range 500-3000
staffIdentifyEnable	boolean	No	True: enable, False: disable

staffIdentifyThreshold	number	No	The reflective area to mark a staff, default value is 500,
staffdetectSens	number	No	The sensitivity of staff recognition, range 1~10. 1) If current sensitivity value is too low, modify the value from 6 to 10. 2) If current sensitivity value is too high, modify the value from 4 to 0.
regionCounting	object	No	
enable	boolean	No	True: enable, False: disable
regoinParam	Object[]	No	
regionName	string	No	
regionCountingEnable	boolean	No	
passByFiltering	number	No	
minDwellTime	number	No	
dwellDetectEnable	boolean	No	True: enable, False: disable
coordinate	object []	No	
X	number	No	
Y	number	No	
index	number	No	0~3 : region ID from 1 to 4
heatmapEnable	boolean	No	The ID of area 1-4 is: 0~3
trackMode	number	No	0: Heads tracking 1: Feet tracking
detectionMode	integer	No	0: disable, 1: enable
resetCumulativeInfo	object	No	
enable	boolean	No	
wDay	integer	No	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Everyday
time	integer	No	Unit: Second, Example: 3600s means 01:00:00
groupCountingEnable	boolean	No	True: enable, False: disable
groupCountingNumMax	number	No	

shoppingCartDetectEn	boolean	No	True: enable, False: disable
maxCartBasketHeight	integer	No	
miniCartBasketHeight	integer	No	

**Request Example:**

```
{
  "resetCumulativeInfo": {
    "enable": true,
    "time": 1554479,
    "wDay": 1
  },
  "deploy": {
    "height": 2800
  },
  "targets": {
    "maxHeight": 2800,
    "minHeight": 2300
  },
  "areas": {
    "enable": false,
    "detectLines": []
  },
  "uturnEnable": false,
  "childrenFilterEnable": true,
  "childrenFilterThreshold": 1300,
  "staffIdentifyEnable": false,
  "staffIdentifyThreshold": 500,
  "regionCounting": {
    "enable": false,
    "regionParam": []
  },
  "heatmapEnable": false,
  "trackMode": 1
}
```

**Return Example:**

```
{
  "command": 105,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 47
}
```

```

}

```

## 2.4 Get DI/DO Configuration

### Request URL:

```

http://192.168.5.220:80/api/v1/counting/getAlarmConfig

```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	
in	object	
inCtrCount	object	
enable	boolean	
triggerMode	number	DI trigger mode: 0: enable people counting when DI status is low 1: enable people counting when DI status is high
status	number	0: success
outConfig	object	
syncPulseInterval	integer	
triggerDigitalOutputEn	boolean	
pulseInfo	object[]	
enable	boolean	
label	string	
pulseWidth	integer	
Detail	string	
status	number	0: success
transmit_cast	number	Processing time

### Return Example:

```

{
  "command": 109,
  "data": {

```

```
"in": {
  "inCtrCount": {
    "enable": false,
    "triggerMode": 1
  },
  "status": 0
},
"outConfig": {
  "pulseInfo": [
    {
      "enable": false,
      "label": "adultsIn",
      "pulseWidth": 100
    },
    {
      "enable": false,
      "label": "adultsOut",
      "pulseWidth": 200
    },
    {
      "enable": false,
      "label": "childrenIn",
      "pulseWidth": 300
    },
    {
      "enable": false,
      "label": "childrenOut",
      "pulseWidth": 400
    },
    {
      "enable": false,
      "label": "staffIn",
      "pulseWidth": 500
    },
    {
      "enable": false,
      "label": "staffOut",
      "pulseWidth": 600
    }
  ],
}
```

```

    {
      "enable": false,
      "label": "groupIn",
      "pulseWidth": 700
    },
    {
      "enable": false,
      "label": "groupOut",
      "pulseWidth": 800
    },
    {
      "enable": true,
      "label": "manualDO",
      "pulseWidth": 5000
    }
  ],
  "syncPulseInterval": 100,
  "triggerDigitalOutputEn": true
}
},
"detail": "ok",
"status": 0,
"transmit_cast": 2
}

```

## 2.5 Set DI/DO Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/setAlarmConfig>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Description
-----------	-------	-------------



in	object	
inCtrCount	object	Input Enable Line Crossing Count Externally
enable	boolean	True: enable, False: disable
triggerMode	number	DI trigger mode: 0: enable people counting when DI status is low 1: enable people counting when DI status is high
outConfig	object	
syncPulseInterval	integer	10-500ms
triggerDigitalOutputEn	boolean	True: enable, False: disable
pulseInfo	object[]	
enable	boolean	True: enable, False: disable
label	string	adultsIn/adultsOut/childrenIn/childrenOut/staffIn/staffOut/groupIn/groupOut/manualDO
pulseWidth	integer	
manualAlarm	boolean	True: trigger the digital output

#### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	No	
detail	string	No	
status	number	No	0: success 1001: configuration error 1002: recording
transmit_cast	number	No	

#### Request Example:

```
{
  "in": {
    "inCtrCount": {
      "enable": false,
      "triggerMode": 1
    }
  },
  "outConfig": {
    "syncPulseInterval": 100,
    "triggerDigitalOutputEn": true,
    "pulseInfo": [
      {
        "enable": false,
```

```
"label": "adultsIn",
"pulseWidth": 100
},
{
  "enable": false,
  "label": "adultsOut",
  "pulseWidth": 200
},
{
  "enable": false,
  "label": "childrenIn",
  "pulseWidth": 300
},
{
  "enable": false,
  "label": "childrenOut",
  "pulseWidth": 400
},
{
  "enable": false,
  "label": "staffIn",
  "pulseWidth": 500
},
{
  "enable": false,
  "label": "staffOut",
  "pulseWidth": 600
},
{
  "enable": false,
  "label": "groupIn",
  "pulseWidth": 700
},
{
  "enable": false,
  "label": "groupOut",
  "pulseWidth": 800
},
{
```

```

        "enable": true,
        "label": "manualDO",
        "pulseWidth": 5000
    }
]
}

```

**Return Example:**

```

{
  "command": 110,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 3
}

```

## 2.6 Reset People Counting Results

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/reset>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
lines	Yes	Number[]	Fill in the Line number
regions	Yes	Number[]	Fill in the Region number

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Order number
status	number	Status Value 0: Success
detail	string	

transmit_cast	number	Processing time
---------------	--------	-----------------

**Request Example:**

```
{
  "lines": [1,2,3,4], //clean all lines countings 1,2,3,4
  "regions": [0,1,2,3] //clean all regions 0,1,2,3 countings
}
```

**Return Example:**

```
{
  "command": 103,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 2.7 Get installation Height

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getRecommendedHeight>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
data	object	
netconfig	object	TCP/IP configuration for Ethernet Port
ipAddress	string	IP address
subnetMask	string	Subnet Mask

**Return Content Example:**

```
{
  "command": 11,
  "data": {
    "autoDetectHeight": 3239
  },
  "detail": "ok",
}
```

```
"status": 0,
"transmit_cast": 202
```

## 2.8 Search Devices

### Request URL:

```
http://192.168.5.220:80/api/v1/system/searchDevices
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Value
searchType	number	0: Search all devices 1: Node devices and haven't been added devices

### Return JSON parameter description:

Parameter	Types	Description
command	number	
detail	string	
status	number	
Transmit_cast	number	

### Request Content Example:

```
{
  "searchType": 0
}
```

### Return Content Example:

```
{
  "command": 30,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 2.9 Get Search Device Lists

### Request URL:

<http://192.168.5.220:80/api/v1/system/getSearchDeviceLists>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	
data	object	
deviceList	Object[]	
ipAddress	string	The IP address of device
deviceName	string	Device name
sn	string	Device SN
port	integer	
detail	string	
status	number	
Transmit_cast	number	

### Return Content Example:

```
{
  "command": 31,
  "data": {
    "deviceList": [
      {
        "deviceName": "People Counter",
        "ipAddress": "192.168.46.80",
        "port": 80,
        "sn": "6757D16179950018"
      },
      {
        "deviceName": "People Counter",
        "ipAddress": "192.168.46.83",
        "port": 80,

```

```

        "sn": "6757D16866970013"
    },
    {
        "deviceName": "People Counter",
        "ipAddress": "192.168.46.90",
        "port": 80,
        "sn": "6757D16909050013"
    }
]
},
"detail": "ok",
"status": 0,
"transmit_cast": 1
}

```

## 2.10 Get Multi-devices Bind Method (VS135 Only)

### Request URL:

```
http://192.168.5.220:80/api/v1/system/getCascadeBindMethod
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

### Return JSON parameter description:

Parameter	Types	Description
detail	string	
status	number	
data	object	
method	Integer	0: PoE, 1:Wi-Fi

### Return Content Example:

```

{
  "detail": "ok",
  "status": 0,
  "data": {

```

```
"method": 0
```

## 2.11 Set Multi-devices Bind Method (VS135 Only)

### Request URL:

```
http://192.168.5.220:80/api/v1/system/setCascadeBindMethod
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Value
method	Integer	No	0: PoE, 1:Wi-Fi

### Return JSON parameter description:

Parameter	Types	Description
status	number	0:success, 2001:Current configuration is unchangeable.
result	integer	
details	string	

### Request Body Example:

```
{
  "method": 0
}
```

### Return Content Example:

```
{
  "status": 0,
  "result": 0,
  "details": "ok"
}
```

## 2.12 Get Multi-devices Configuration

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/getCascadeConfig
```



**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
cascadeMode	number	
masterConfig	string	
masterSettings	object	
lensParam	object	
fx	number	
fy	number	
zoom	number	
workFreq	integer	0-7: ToF work frequency
masterDeviceName	string	
masterIPAddress	string	
masterSN	string	
slaveSettings	Object[]	
deployHeight	number	
lensParam	object	
fx	number	
fy	number	
zoom	number	
workFreq	integer	0-7: ToF work frequency
relativeAngle	number	
relativeX	number	
relativeY	number	
slaveDeviceName	string	
slaveIPAddress	string	
slaveSN	string	
status	number	
detail	string	

status	number	
Transmit_cast	number	

**Return Content Example:**

```
{
  "command": 122,
  "data": {
    "cascadeMode": 1,
    "masterConfig": {
      "masterSettings": {
        "lensParam": {
          "fx": 168.09884600000001,
          "fy": 168.090271,
          "zoom": 1.1599999999999999
        },
        "workFreq": 0,
        "masterDeviceName": "People Counter",
        "masterIPAddress": "192.168.5.220",
        "masterSN": "6767E21888890021"
      },
      "slaveSettings": [
        {
          "deployHeight": 1300,
          "lensParam": {
            "fx": 168.09884600000002,
            "fy": 168.090271,
            "zoom": 1.0999999999999999
          },
          "workFreq": 1,
          "relativeAngle": 45,
          "relativeX": 1000,
          "relativeY": 1300,
          "slaveDeviceName": "People Counter",
          "slaveIPAddress": "192.168.1.1",
          "slaveSN": "6767E21235508673",
          "status": 0
        }
      ]
    }
  },
}
```

```

"detail": "string",
"status": 0,
"transmit_cast": 0
}

```

## 2.13 Set Multi-devices Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/setCascadeConfig>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Value
cascadeMode	number	No	0: standalone 1: master 2: node/slave
slaveConfig	object	No	Only effect at node/slave mode
control	string	No	0: bind 1: unbind
masterConfig	object	No	Only affect at master mode
slaveSettings	Object[]	No	
slaveIPAddress	string	No	
slavePort	integer	No	
slaveSN	string	No	
slaveDeviceName	string	No	
deployHeight	number	No	
relativeX	number	No	
relativeY	number	No	
relativeAngle	number	No	
slaveUsername	string	No	
slavePassword	string	No	

### Return JSON parameter description:

Parameter	Types	Description
command	number	
detail	string	
status	number	
Transmit_cast	number	

**Request Body Example:**

```
{
  "slaveConfig": {
    "control": 1
  }
}
```

**Return Content Example:**

```
{
  "command": 123,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 59
}
```

## 2.14 Request Frames from Node Devices

This only works when the device works as master mode.

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/requesetFrameFromSlave
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
imageType	No	Number	Type of image 0: gray, 1: dist

**Request Example:**

```
{
  "imageType": 1
}
```

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
detail	string	
status	number	
Transmit_cast	number	

**Return Content Example:**

```
{
  "command": 124,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 55
}
```

## 2.15 Get Multi-devices Image

It needs to send request frame from node device command before executing this command.

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getCascadeImage>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Value
queryType	number	No	0: stitched image 1: raw image

**Return JSON parameter description:**

Parameter	Types	Description
-----------	-------	-------------

command	number	
data	object	
queryType	number	0: stitched image, 1: raw image
cascadeImageBase64	string	
rawFrameData	object	
masterImageBase64	string	
slaveData	object	
slaveImageBase64	string	
cascadeInfo	Object[]	
offsetX	integer	
offsetY	integer	
zoom	integer	
relativeAngle	integer	
detail	string	
status	number	
Transmit_cast	number	

**Request Example:**

```
{
  "queryType": 1
}
```

**Return Content Example:**

```
{
  "command": 125,
  "data": {
    "queryType": 1,
    "rawFrameData": {
      "masterImageBase64": "/9j/4AAQSkZJRgABAQAAQABAAD/2wBDA.....",
      "slaveData": [
        {
          "cascadeInfo": {
            "offsetX": -153.92561340332031,
            "offsetY": -21.669765472412109,
            "relativeAngle": 0,
            "zoom": 0.93484902381896973
          }
        },
        "slaveImageBase64": "/9j/4AAQSkZJRgABAQ....."
      ]
    }
  }
}
```

```

    "cascadeInfo": {
      "offsetX": -149.989013671875,
      "offsetY": -85.131217956542969,
      "relativeAngle": 0,
      "zoom": 0.97160643339157104
    },
    "slaveImageBase64": "/9j/4AAQSkZJRgABAQ....."
  },
  {
    "cascadeInfo": {
      "offsetX": 3.0962049961090088,
      "offsetY": -101.14030456542969,
      "relativeAngle": 0,
      "zoom": 0.92452764511108398
    },
    "slaveImageBase64": "/9j/4AAQSkZJRgABAQ....."
  }
]
}
},
"detail": "ok",
"status": 0,
"transmit_cast": 33
}

```

## 2.16 Get Tailgating Detection Configuration

### Request URL:

<http://192.168.5.220/api/v1/counting/getTailgatingDetectionConf>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

### Return JSON parameter description:

Parameter	Types	Description
-----------	-------	-------------

command	number	Order number
data	object	
currentStatus	integer	0: low, 1: high
detectLine	integer	DETECT_LINE_1 = 0, DETECT_LINE_2 = 1, DETECT_LINE_3 = 2, DETECT_LINE_4 = 3,
outputPulseWidth	integer	
tailgatingEnable	boolean	
triggerMode	integer	0: low, 1: high
triggerValidityPeriod	integer	Unit: s, range: 1-60
Detail	string	
status	number	0: success
transmit_cast	number	Processing time

**Return Example:**

```
{
  "command": 129,
  "data": {
    "currentStatus": 0,
    "detectLine": 1,
    "outputPulseWidth": 100,
    "tailgatingEnable": true,
    "triggerMode": 1,
    "triggerValidityPeriod": 10
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 2
}
```

## 2.17 Set Tailgating Detection Configuration

**Request URL:**

<http://192.168.5.220/api/v1/counting/setTailgatingDetectionConf>

**Request Method:**

post method

**Request JSON parameter description:**

Headers



Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Types	Required	Value
detectLine	integer	yes	DETECT_LINE_1 = 0, DETECT_LINE_2 = 1, DETECT_LINE_3 = 2, DETECT_LINE_4 = 3,
outputPulseWidth	integer	yes	
tailgatingEnable	boolean	yes	
triggerMode	integer	yes	0: low, 1: high
triggerValidityPeriod	integer	yes	Unit: s, range: 1-60

## Return JSON parameter description:

Parameter	Types	Required	Description
detail	string	No	
status	number	No	0: success

## Request Example:

```
{
  "tailgatingEnable": true
  "outputPulseWidth": 250
  "triggerValidityPeriod" : 20
  "detectLine" : 2
}
```

## Return Example:

```
{
  command: 130
  detail: "ok"
  status: 0
  transmit_cast: 1
}
```

## 3. Communication

### 3.1 Get Network Configuration

**Request URL:**

<http://192.168.5.220:80/api/v1/system/getIpconfig>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

**Return JSON parameter description:**

Parameter	Types	Description
data	object	
netconfig	object	TCP/IP configuration for Ethernet Port
ipAddress	string	IP address
subnetMask	string	Subnet Mask
DefaultGateway	string	Default Gateway
MACAddress	string	MAC Address of Ethernet Port
MTU	string	MTU
PrimaryDNS	string	Primary DNS Server
SecondaryDNS	string	Secondary DNS Server
dhcp	string	
detail	string	Return Information
status	number	Status Value 0: Success

**Return Example:**

```
{
  "command": 10,
  "data": {
    "netconfig": {
      "DefaultGateway": "192.168.45.1",
      "MACAddress": "24:E1:24:FF:00:04",
```

```

    "MTU": "1500",
    "PrimaryDNS": "8.8.8.8",
    "SecondaryDNS": "223.5.5.5",
    "dhcp": "false",
    "ipAddress": "192.168.45.252",
    "subnetMask": "255.255.255.0"
  }
},
"detail": "ok",
"status": 0,
"transmit_cast": 48
}

```

## 3.2 Set Network Configuration

### Request URL:

```
http://192.168.5.220:80/api/v1/system/setIpconfig
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
netconfig	No	object	
dhcp	No	string	
ipAddress	No	string	
subnetMask	No	string	
DefaultGateway	No	string	
PrimaryDNS	No	string	
SecondaryDNS	No	string	

### Request Example:

```
{
```

```

"netconfig": {
  "ipAddress": "192.168.68.75",
  "DefaultGateway": "192.168.68.1",
  "PrimaryDNS": "8.8.8.8",
  "SecondaryDNS": "223.5.5.5"
}

```

#### Return JSON parameter description:

Parameter	Types	Description
detail	string	Return Information
needReboot	boolean	
status	number	Status Value -1: configuration error, 0: Success, 1122: Network segment conflicts with WLAN IP 1123: Network segment conflicts with WiFi Halow gateway IP 1124: Network segment conflicts with WLAN Client IP

#### Return Example:

```

{
  "command": 11,
  "detail": "ok",
  "needReboot": true,
  "status": 0,
  "transmit_cast": 98
}

```

## 3.3 IP conflict detection test

#### Request URL:

```
http://192.168.5.220:80/api/v1/system/testIpExist
```

#### Request Method:

post method

#### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
ip	Yes	string	

#### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	
ipExist	boolean	Indicates whether IP addresses conflict. true indicates conflict. false indicates no conflict. When the target indicates no conflict, a 3-second ping delay is triggered
detail	string	
status	number	0: success
transmit_cast	number	Processing time

#### Request Body Example:

```
{
  "ip": "192.168.60.183"
}
```

#### Return Example:

```
{
  "command": 20,
  "data": {
    "ipExist": false
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 4079
}
```

## 3.4 Get Recipient Configuration

#### Request URL:

<http://192.168.5.220:80/api/v1/counting/getReportParam>

#### Request Method:

post method

#### Request JSON parameter description:

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Type	Required	Value
recipientID	Integer	Yes	1-6

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
recipientConfig	object	
protocolSetting	object	
reportProtocol	integer	1: http 2: mqtt 3: BACnet
bacnetConfig	object	
bbmdEnable	boolean	
bbmdIpAddress	string	
deviceId	number	
deviceName	string	
timeToAlive	number	
udpPort	number	
httpConfig	object	
username	string	
password	integer	
targetUrl	string	
mqttConfig	object	
certificateType	number	0: CA signed server 1: Self signed
clientCertExist	boolean	
clientKeyExist	boolean	
rootCertExist	boolean	
tlsEnable	boolean	
clientId	string	
qos	integer	0: qos 0 1: qos 1 2: qos 2

host	string	
topic	string	
username	string	
password	integer	
port	integer	
recipientID	integer	Range 1~6
recipientName	string	
reportStrategy	integer	
periodEnable	boolean	
periodMode	integer	0: On the Dot 1: From now
onTheDotMin	integer	Unit: minute
periodIntervalMin	integer	
triggerEnable	boolean	
dataRetransmissionEnable	boolean	
customizeReportEnable	boolean	
customizeDeviceInfo	integer	Every bit as a enable status(0: close, 1: open) bit0: device name; bit1: device SN; bit2: MAC; bit3: ip; bit4: device ID; bit5: custom site ID; bit6: running time; bit7: firmware version; bit8: hardware version
customizeTimeInfo	integer	Every bit as a enable status(0: close, 1: open) bit0: trigger time; bit1: start time; bit2: end time; bit3: time zone; bit4: DST enable; bit5: DST status
networkInfo	integer	VS135 cellular version only Every bit as a enable status(0: close, 1: open) bit0: network status;

		bit1: ICCID; bit2: IMEI; bit3: cell ID; bit4: LAC
lineTriggerDataEnable	integer	
regionTriggerData	integer	Every bit as a enable status(0: close, 1: open) bit0: Region Count Data; bit1: Dwell Time Data; bit2: Dwell Start Time;=
linePeriodicDataEnable	integer	
lineTotalData	integer	Every bit as a enable status(0: close, 1: open) bit0: Line Count Data; bit1: Capacity Counted
regionPeriodicDataEnable	integer	
lineRegionNameEnable	integer	
lineRegionUuidEnable	integer	
alarmDataEnable	integer	
loraReportStrategy	object	VS13x LoRaWAN version only
periodEnable	boolean	
periodIntervalMin	integer	
triggerEnable	boolean	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

**Request Example:**

```
{
  "recipientID": 1
}
```

**Return Example:**

```
{
  "command": 117,
  "data": {
    "recipientConfig": {
      "protocolSetting": {
        "bacnetConfig": {
```



```
"bbmdEnable": false,
"bbmdIpAddress": "",
"deviceId": 0,
"deviceName": "",
"timeToAlive": 3600,
"udpPort": 47808
},
"httpConfig": {
  "password": 0,
  "targetUrl": "http://192.168.45.14",
  "username": ""
},
"mqttConfig": {
  "certificateType": 0,
  "clientCertExist": false,
  "clientId": "",
  "clientKeyExist": false,
  "host": "",
  "password": 0,
  "port": 0,
  "qos": 0,
  "rootCertExist": false,
  "tlsEnable": false,
  "topic": "",
  "username": ""
},
"reportProtocol": 1
},
"recipientID": 1,
"recipientName": "Recipient",
"reportStrategy": {
  "alarmDataEnable": 1,
  "customizeDeviceInfo": 511,
  "customizeReportEnable": true,
  "customizeTimeInfo": 63,
  "dataRetransmissionEnable": false,
  "linePeriodicDataEnable": 1,
  "lineRegionNameEnable": 1,
  "lineRegionUuidEnable": 1,
```

```

        "lineTotalData": 3,
        "lineTriggerDataEnable": 1,
        "onTheDotMin": 60,
        "periodEnable": true,
        "periodIntervalMin": 10,
        "periodMode": 0,
        "regionPeriodicDataEnable": 1,
        "regionTriggerData": 7,
        "triggerEnable": true
    }
}
},
"detail": "ok",
"status": 0,
"transmit_cast": 2
}

```

### 3.5 Set Recipient Configuration

#### Request URL:

<http://192.168.5.220:80/api/v1/counting/setReportParam>

#### Request Method:

post method

#### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
method	integer	yes	0: add; 1: delete; 2: modify
recipientID	integer	yes	1~6, if 3 is deleted, a new one will re-use 3.
recipientConfig	object	yes	No need to send this object when delete
protocolSetting	object	yes	
reportProtocol	number	yes	1: HTTP, 2: MQTT, 3: BACnet

bacnetConfig	object	yes	
bbmdEnable	boolean	yes	
bbmdIpAddress	string	yes	
bbmdPort	number	yes	
deviceId	number	yes	
deviceName	string	yes	
timeToAlive	number	yes	
udpPort	number	yes	
httpConfig	object	yes	
password	string	yes	
username	string	yes	
targetUrl	string	yes	
mqttConfig	object	yes	
certificateType	number	yes	0: CA signed server 1: Self signed
deleteClientCert	boolean	yes	
deleteClientKey	boolean	yes	
deleteRootCert	boolean	yes	
tlsEnable	boolean	yes	
clientId	string	yes	
qos	integer	yes	0: qos 0 1: qos 1 2: qos 2
host	string	yes	
topic	string	yes	
username	string	yes	
password	integer	yes	
port	string	yes	
reportStrategy	integer	yes	
periodEnable	boolean	yes	Enable periodic report
periodMode	integer	yes	0: On the dot 1: From now on
onTheDotMin	integer	yes	On the dot time, Unit: minute
periodIntervalMin	integer	yes	From now on time, Unit: minute
triggerEnable	boolean	yes	
dataRetransmissionEnable	boolean	yes	

customizeReportEnable	boolean	yes	
customizeDeviceInfo	integer	yes	Report device information. Each bit to enable report different info (0: close, 1: open) bit0: device name; bit1: device SN; bit2: MAC; bit3: ip; bit4: device ID; bit5: custom site ID; bit6: running time; bit7: firmware version; bit8: hardware version
customizeTimeInfo	integer	yes	Report device information. Each bit to enable report different info (0: close, 1: open) bit0: trigger time; bit1: start time; bit2: end time; bit3: time zone; bit4: DST Enable; bit5: DST status
networkInfo	integer	yes	VS135 cellular version only Every bit as a enable status(0: close, 1: open) bit0: network status; bit1: ICCID; bit2: IMEI; bit3: cell ID; bit4: LAC
lineTriggerDataEnable	integer	yes	
regionTriggerData	integer	yes	Report device information. Each bit to enable report different info (0: close, 1: open) bit0: Region Count Data;

			bit1: Dwell Time Data; bit2: Dwell Start Time
linePeriodicDataEnable	integer	yes	
lineTotalData	integer	yes	Report device information. Each bit to enable report different info (0: close, 1: open) bit0: Line Count Data; bit1: Capacity Counted
regionPeriodicDataEnable	integer	yes	
lineRegionNameEnable	integer	yes	
lineRegionUuidEnable	integer	yes	
alarmDataEnable	integer	yes	
recipientName	integer	yes	
recipientID	integer	yes	1~6, if 3 is deleted, creating a new one will re-use 3.
loraReportStrategy	object	yes	VS13x LoRaWAN version only
periodEnable	boolean	yes	
periodIntervalMin	integer	yes	
triggerEnable	boolean	yes	

**Return JSON parameter description:**

Parameter	Description
Detail	string
Status	Integer value

**Request Example:**

```
{
  "method": 2,
  "recipientID": 1,
  "recipientConfig": {
    "protocolSetting": {
      "bacnetConfig": {
        "bbmdEnable": false,
        "bbmdIpAddress": "",
        "deviceId": 0,
        "deviceName": "",
        "timeToAlive": 3600,

```

```
"udpPort": 47808
},
"httpConfig": {
  "password": "",
  "targetUrl": "http://192.168.45.13",
  "username": ""
},
"mqttConfig": {
  "certificateType": 0,
  "deleteClientCert": false,
  "clientId": "",
  "deleteClientKey": false,
  "host": "",
  "password": "",
  "port": "",
  "qos": 0,
  "deleteRootCert": false,
  "tlsEnable": false,
  "topic": "",
  "username": ""
},
"reportProtocol": 1
},
"recipientID": 1,
"recipientName": "Recipient",
"reportStrategy": {
  "alarmDataEnable": 1,
  "customizeDeviceInfo": 511,
  "customizeReportEnable": true,
  "customizeTimeInfo": 63,
  "dataRetransmissionEnable": false,
  "linePeriodicDataEnable": 1,
  "lineRegionNameEnable": 1,
  "lineRegionUuidEnable": 1,
  "lineTotalData": 3,
  "lineTriggerDataEnable": 1,
  "onTheDotMin": 60,
  "periodEnable": true,
  "periodIntervalMin": 10,
```

```

    "periodMode": 1,
    "regionPeriodicDataEnable": 1,
    "regionTriggerData": 7,
    "triggerEnable": true
  }
}
}

```

**Return Example:**

```

{
  "command": 17,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}

```

### 3.6 Get Recipient List

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getRecipientParam>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
detail	object	
status	number	
Transmit_cast	number	
data	object	
recipientInfo	Object[]	
recipientID	integer	
recipientName	string	
connectStatus	integer	1: Connected 0: Disconnected

address	string	url or host
reportProtocol	integer	

**Return Example:**

```
{
  "command": 18,
  "data": {
    "recipientInfo": [
      {
        "address": "192.168.45.16",
        "connectStatus": 0,
        "recipientID": 4,
        "recipientName": "Recipient",
        "reportProtocol": 2
      },
      {
        "address": "192.168.45.16",
        "connectStatus": 0,
        "recipientID": 3,
        "recipientName": "Recipient",
        "reportProtocol": 1
      },
      {
        "address": "192.168.45.15",
        "connectStatus": 1,
        "recipientID": 2,
        "recipientName": "Recipient",
        "reportProtocol": 2
      },
      {
        "address": "http://192.168.45.12",
        "connectStatus": 0,
        "recipientID": 1,
        "recipientName": "Recipient",
        "reportProtocol": 1
      }
    ]
  },
  "detail": "ok",
  "status": 0,
}
```



```
"transmit_cast": 1
```

### 3.7 Get Net Report Status

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/getNetReportStatus
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
netPortStatus	boolean	0: disconnected 1: connected
detail	string	
status	number	
Transmit_cast	number	

**Return Example:**

```
{
  "command": 12,
  "data": {
    "httpStatus": false,
    "mqttStatus": false
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

### 3.8 Update Net Report Status

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/updateNetReportStatus>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Description
event	String	Yes	Only support http, to update the upload type

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
httpStatus	boolean	
mqttStatus	boolean	
detail	string	
status	number	
Transmit_cast	number	

**Return Example:**

```
{
  "command": 12,
  "data": {
    "httpStatus": false,
    "mqttStatus": true
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

### 3.9 Get 802.1X Configuration

**Request URL:**

<http://192.168.5.220:80/api/v1/system/getNetAccessCtrl>

**Request Method:**

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	
data	object	
802.1x	boolean	
authType	number	0: EAP-MD5, 1: EAP-TLS
eapolVersion	number	
enable	boolean	
password	number	Return the length of password
username	string	
privateKeyPasswd	string	Return the length of password
clientCertFileExist	boolean	
clientKeyFileExist	boolean	
rootCertFileExist	boolean	
detail	string	
status	number	
Transmit_cast	number	

### Return Example:

```
{
"command": 28,
  "data": {
    "802.1x": {
      "authType": 1,
      "clientCertFileExist": true,
      "clientKeyFileExist": true,
      "eapolVersion": 0,
      "enable": false,
      "password": 5,
      "privateKeyPasswd": 5,
      "rootCertFileExist": true,
      "username": "nancy"
    }
  }
},
```

```

"detail": "ok",
"status": 0,
"transmit_cast": 0
}

```

### 3.10 Set 802.1X Configuration

#### Request URL:

```
http://192.168.5.220:80 /api/v1/system/setNetAccessCtrl
```

#### Request Method:

post method

#### Request JSON parameter description:

##### Headers

Parameter	Required	Value
Content-Type	Yes	application/json

##### Body

Parameter	Types	Description
802.1x	boolean	
authType	number	0: EAP-MD5 1:EAP-TLS
eapolVersion	number	0:802.1x-2001, 1:802.1x-2004
enable	boolean	
password	string	Only for EAP-MD5
username	string	
privateKeyPasswd	string	Only for EAP-TLS
deleteClientCert	boolean	true: delete
deleteClientKey	boolean	true: delete
deleteRootCert	boolean	true: delete

#### Request Example:

```

"802.1x": {
  "authType": 0,
  "eapolVersion": 0,
  "enable": false,
  "password": ms123456,
  "username": "nancy"
}

```

### 3.11 Import 802.1x Certification File

**Request URL:**

<http://192.168.5.220/api/v1/dataload/upload/securityServiceCert>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	multipart/form-data

Query

Parameter	Required	Description
type	yes	rootCert:root Certification, clientCert:client Certification, clientKey:client key

Body

Parameter	Types	Required	Description
file	file	yes	

**Return JSON parameter description:**

Parameter	Types	Required	Description
detail	string	no	success: ok
status	integer	no	0: success, 1: fail

**Return Example:**

```
{
  "detail": "success",
  "status": 0,
}
```

### 3.12 Get OpenVPN Configuration

**Request URL:**

<http://192.168.5.220/api/v1/system/getOpenvpnParam>

**Request Method:**

post method

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Return JSON parameter description:

Parameter	Types	Description
command	number	
data	object	
openVpnConfFileExist	boolean	
status	integer	0:disconnect ; 1:connect ; 2:connecting
deviceVirtualIp	string	
serverVirtualIp	string	
duration	integer	Unit: s
enable	boolean	
detail	string	
status	number	
Transmit_cast	number	

## Return Example:

```
{
  "command": 34,
  "data": {
    "deviceVirtualIp": "",
    "duration": 0,
    "enable": false,
    "openVpnConfFileExist": true,
    "serverVirtualIp": "",
    "status": 0
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}
```

### 3.13 Set OpenVPN Configuration

## Request URL:

```
http://192.168.5.220/api/v1/system/setOpenvpnParam
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
enable	boolean	no	
deleteConfigFile	boolean	no	True: enable, False: disable

**Return JSON parameter description:**

Parameter	Types	Description
detail	string	
status	integer	

**Request Example:**

```
{
  deleteConfigFile: true
},
```

**Return Example:**

```
{
  "command": 35,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 10
}
```

## 3.14 Import OpenVPN File

**Request URL:**
<http://192.168.5.220/api/v1/dataload/upload/openvpnConf>
**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	multipart/form-data

## Body

Parameter	Types	Required	Description
file	file	yes	file

## Return JSON parameter description:

Parameter	Types	Required	Description
detail	string	no	
status	integer	no	0: success, -1: fail

## Return Example:

```
{
  "detail": "success",
  "status": 0,
}
```

### 3.15 Report System Status (websocket)

## Request URL:

<http://192.168.5.220/systemd/status/>

## Request Method:

post method

## Return JSON parameter description:

Parameter	Types	Required	Description
action	string	No	transmit: auto report
message	string	No	cellularStatus: cellular network status; openvpnStatus: openvpn status
cellularStatus	integer	No	0: disconnect; 1: connect
openvpnStatus	integer	No	0: disconnect; 1: connect; 2;connecting

### 3.16 Get BACnet Object

## Request URL:

<http://192.168.5.220/api/v1/counting/getBACnetObject>

## Request Method:

post method

## Request JSON parameter description:

Headers



Parameter	Required	Value
Content-Type	Yes	application/json

**Return JSON parameter description:**

Parameter	Types	Description
command	number	
data	object	
bacnetObject	object[]	
name	string	
select	number	0: Accumulative In 1: Accumulative Out 2: Region People 3: Dwell Time Max. 4: Dwell Time Average
type	number	0: Analog Input
unit	number	0: no units, 1: seconds
detectionNum	number	line/ region 0-3
instanceNo	number	0-4194303
description	string	
covEnable	boolean	
covIncrement	number	
id	number	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

**Return Example:**

```
{
  command: 131
  data: {
    bacnetObject: [{
      covEnable: false
      covIncrement: 1
      description: ""
      detectionNum: 1
      id: 1
      instanceNo: 0
      name: "Cumulative Individuals In-Line2"
      select: 0
    }]
  }
}
```

```

    type: 0
    unit: 0
  }
]
},
detail: "ok"
status: 0
transmit_cast: 1
}

```

### 3.17 Set BACnet Object

#### Request URL:

<http://192.168.5.220/api/v1/counting/setBACnetObject>

#### Request Method:

post method

#### Request JSON parameter description:

##### Headers

Parameter	Required	Value
Content-Type	Yes	application/json

##### Body

Parameter	Types	Required	Description
method	number	no	0: add; 1: delete; 2: modify
bacnetObject	object	no	
name	string	no	
select	number	no	0: Accumulative In 1: Accumulative Out 2: Region People 3: Dwell Time Max. 4: Dwell Time Average
type	number	no	0: Analog Input
unit	number	no	0: no units, 1: seconds
detectionNum	number	no	line/ region 0-3
instanceNo	number	no	0-4194303
description	string	no	
covEnable	boolean	no	
covIncrement	number	no	

id	number	no	
----	--------	----	--

**Return JSON parameter description:**

Parameter	Type	Description
Detail	string	
Status	number	
Transmit_cast	number	0: success 1001: configuration error 1002: configuration conflict

**Request Example:**

```
{
  "bacnetObject": {
    "covEnable": false,
    "covIncrement": 1,
    "description": "",
    "detectionNum": 1,
    "id": 1,
    "instanceNo": 1,
    "name": "Cumulative Individuals In-Line2",
    "select": 0,
    "type": 0,
    "unit": 0
  },
  "method": 0
}
```

**Return Example:**

```
{
  "command": 132,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}
```

### 3.18 Get WiFi List (VS135 Only)

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/getWifiList
```

**Request Method:**

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

### Return JSON parameter description:

Parameter	Types	Description
data	object	
wifiList	object[array]	
bssid	string	
rssi	integer	
encryptionType	integer	0:Unencrypted, 1:sae
ssid	string	
detail	string	Return Information
status	number	Status Value 0: Success

### Return Example:

```
{
  "detail": "ok",
  "status": 0,
  "data": {
    "wifiList": [
      {
        "bssid": "24:e1:24:f5:40:93",
        "rssi": -48,
        "encryptionType": 1,
        "ssid": "Gateway_F54093"
      }
      {
        "bssid": "24:e1:24:fa:69:11"
        "encryptionType": 0
        "rssi": -50
        "ssid": "People Counter_FA6911"
      }
      {
        "bssid": "6c:44:2a:22:25:84"
        "encryptionType": 1
      }
    ]
  }
}
```

```

    "rssi": -54
    "ssid": "Milesight_Guest"
  }
}
}

```

### 3.19 Search WiFi List (VS135 Only)

#### Request URL:

```
http://192.168.5.220:80/api/v1/system/sanWifiList
```

#### Request Method:

post method

#### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

#### Return JSON parameter description:

Parameter	Types	Description
detail	string	
status	number	
result	number	0:ok, 1:busy, 2:error

#### Return Example:

```

{
  "detail": "ok",
  "status": 0,
  "result": 2
}

```

### 3.20 Get WiFi Information (STA) (VS135 Only)

#### Request URL:

```
http://192.168.5.220:80/api/v1/system/getStaWifiInfo
```

#### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

### Return JSON parameter description:

Parameter	Types	Description
data	object	
bssid	string	
ssid	string	
key	string	
isConnected	integer	0: disconnect, 1:connect
countryCode	string	
detail	string	Return Information
status	number	Status Value 0: Success

### Return Example:

```
{
  "detail": "ok",
  "status": 0,
  "data": {
    "bssid": "6c:44:2a:22:25:81",
    "ssid": "People Counter_343537",
    "key": "123456",
    "isConnected": 1,
  }
}
```

## 3.21 Set WiFi Information (STA) (VS135 Only)

### Request URL:

<http://192.168.5.220:80/api/v1/system/setStaWifiParam>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Description
bssid	string	
ssid	string	
key	string	

**Return JSON parameter description:**

Parameter	Type	Description
details	string	
status	number	-1: configuration error 0: set success/connect success 1200: disconnect (password error) 1121: Network segment conflicts with TCP/IP 1122: Network segment conflicts with WLAN IP 1123: Network segment conflicts with WiFi Halow gateway IP

**Request Example:**

```
{
  "bssid": "44:87:63:2e:0f:7d",
  "ssid": "People Counter_FA78BE",
  "key": "ms123456"
}
```

**Return Example:**

```
{
  "status": 0,
  "details": "ok"
}
```

## 3.22 Set WiFi Configuration

**Request URL:**

<http://192.168.5.220:80/api/v1/system/setWifiConfig>

**Request Method:**

post method

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Types	Required	Description
enable	string	no	
mode	string	no	
ssid	string	no	
protocol	string	no	
bandwidth	string	no	
channel	string	no	
securityMode	string	no	
wifiPwd	string	no	
cipher	string	no	
lanIp	string	no	
netmask	string	no	
startAddr	string	no	
endAddr	string	no	
leaseTime	string	no	
primaryDNS	string	no	
subDNS	string	no	

**Request Example:**

```
{
  "enable": "true",
  "mode": "ap",
  "ssid": "People Counter_FA69ED",
  "protocol": "2",
  "bandwidth": "0",
  "channel": "1",
  "securityMode": "No Encryption",
  "wifiPwd": "12345678",
  "cipher": "2",
  "lanIp": "192.168.1.1",
  "netmask": "255.255.255.0",
  "startAddr": "192.168.1.100",
  "endAddr": "192.168.1.199",
  "leaseTime": "1440",
```



```

"primaryDNS": "8.8.8.8",
"subDNS": "114.114.114.114"
}

```

**Return JSON parameter description:**

Parameter	Types	Description
details	string	Return Information
status	integer	-1: configuration error 0: set success 1121: Network segment conflicts with TCP/IP 1123: Network segment conflicts with WiFi Halow gateway IP 1124: Network segment conflicts with WLAN IP 1125: Network segment conflicts with cellular segment 2001: Current configuration is not changeable

**Return Example:**

```

{
  "status": 0,
  "details": "ok"
}

```

### 3.23 Set Halow WiFi Configuration (VS135-HL Only)

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/setHalowWifiParam
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
bssid	string	no	
ssid	string	no	

key	string	no	
-----	--------	----	--

**Request Example:**

```
{
  "bssid": "24:e1:24:f7:77:3d",
  "ssid": "People Counter_151617",
  "key": "ms123456"
}
```

**Return JSON parameter description:**

Parameter	Types	Description
details	string	Return Information
status	integer	-1: configuration error 0: set success 1200: disconnect 1121: Network segment conflicts with TCP/IP 1122: Network segment conflicts with WLAN IP 1124: Network segment conflicts with WLAN Client IP 2001: Current configuration is not changeable

**Return Example:**

```
{
  "status": 0,
  "details": "ok"
}
```

## 4. Report

Noted user can use below two API to get local records data, and invoke 2.2 Get People Counting Configuration to know uuid of different line and regions.

### 4.1 Get DataRecord from Database

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getDatabseRecords>

**Request Method:**

post method

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Types	Required	Description
timeStart	string	Yes	Start time of the record, Format:YYYY-MM-DDTHH:00:00.000
uuid	string	Yes	A random unique ID defined by user
timeEnd	string	Yes	End time of the record, Format:YYYY-MM-DDTHH:00:00.000
event	number	Yes	0: Line crossing counting 1: Region people counting 2: Dwell time detection 3: Heat map
lineParam	object	No	
line	number	No	The target line number
timeBinWidth	number	No	The interval of query time, the unit is minute
timeUnit	number	No	0: hour, 1: day, 2: month
mode	number	No	0: individuals, 1: groups, 2: shopping cart
regionCounting	object	No	
regionID	number	Yes	0-3
mode	number	Yes	0: individuals, 2: shopping cart
dwellDetect	object	No	
regionID	number	Yes	
timeMin	number	Yes	
timeBinWidth	number	Yes	
numberOfBins	number	Yes	
heatmap	object	No	
type	number	Yes	0: Motion Heatmap 1: Dwell Heatmap

**Request Example:**

```
{
  "uuid": "00000001-7090-6995-dd60-8f51d237d3aca50a",
  "event": 1
}
```

**Return Example:**

```
{
  "command": 16,
  "data": {
    "event": 0,
    "searchStatus": 0
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}
```

## 4.2 Get Counting Record Result

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/getRecordsResult
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
uuid	Yes	string	The uuids must be the same with 4.1 generated
event	Yes	number	0: Line crossing counting 1: Region people counting 2: Dwell time detection 3: Heat map

**Request Example:**

```
{
  "uuid": "00000001-7090-6995-dd60-8f51d237d3aca50a",
  "event": 1
}
```

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Return Information
data	object []	Return data
event	number	0: Line crossing counting 1: Region people counting 2: Dwell time detection 3: Heat map
searchStatus	number	0: uuid not found 1: Waiting for searching 2: Updating 3: Data updating completely
lineRecords	object	Report when event is 0 ,and the searchstatus is 3
accChildrenEnter	number	
accChildrenLeave	number	
accEnter	number	
accLeave	number	Total number of people leaving the zone during the specified period
accStaffEnter	number	
accStaffLeave	number	
regionRecords	object	Report when event is 1 ,and the searchstatus is 3
records	object[]	
total	number	
staff	number	
children	number	
emptyCarts	number	
partialLoadCarts	number	
fullCarts	number	
time	number	
totalCount	string	
dwellRecords	object	Report when event is 2 ,and the searchstatus is 3
records	object[]	
total	number	
staff	number	
children	number	

time	number	
totalCount	string	
heatmap	object	Report when event is 3 ,and the searchstatus is 3
records	object[]	
X	number	
Y	number	
value	number	
width	number	Width of the heatmap data grid
height	number	Height of the heatmap data grid
max	number	The Maximum value of heat map
min	number	The minimum value of heat map
realMapWidth	number	Master mode: 1920 Standalone mode: 320
realMapHeight	string	Master mode: 1440 Standalone mode: 240
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

### Return Example:

```
{
  "command": 16,
  "data": {
    "event": 0,
    "searchStatus": 0
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 5. Validation

### 5.1 Get Playback Configuration

**Request URL:**

<http://192.168.5.220:80/api/v1/counting/getPlaybackParam>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Type	Required	Value
playbackID	Integer	No	

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Order number
data	object	Return data
bitrate	number	
encodeType	number	0: H264 1: H265
playbackID	number	
recordDuration	number	
recordStartTime	string	
recordStartTimeStamp	string	
recordStatus	number	0: Not record 1:Recording 2: Record finish 3.Manual stop 4.abnormal stop
taskDuration	number	
taskEnable	boolean	

taskStartTime	string	
taskName	string	
videoQuality	number	0: standard 1: low
algoParam	object	
areas	object	
detectLines	Array[]	
lineNames	String[]	
lineUuids	String[]	
uturnArea	Array[]	
ChildrenFilterEnable	boolean	
ChildrenFilterThreshold	number	
deploy	object	
angle	number	
height	number	
groupCountingEnable	boolean	
groupCountingNumMax	number	
heatmapEnable	boolean	
regionCounting	object	
enable	boolean	
regionParam	string[]	
staffDetectSens	number	
staffidentityEnable	boolean	
staffidentifyThreshold	number	
targets	object	
maxHeight	number	
minHeight	number	
trackMode	number	
uturnEnable	boolean	
cascadeConfig	object	Report on multi-device stitching master devices
masterConfig	object	
masterSettings	object	
lensParam	object	
fx	number	
fy	number	
zoom	number	
masterDeviceName	string	



masterIPAddress	string	
masterSN	string	
slaveSettings	object[]	
deployHeight	number	
lensParam	object	
fx	number	
fy	number	
zoom	number	
relativeAngle	number	
relativeX	number	
relativeY	number	
slaveDeviceName	String	
slaveIPAddress	String	
slavePort	number	
slaveSN	string	
status	number	
detail	string	Return Information
status	number	Status Value 0: Success 1001: Playback ID no found
transmit_cast	number	Processing time

**Return Example:**

```
{
  "command": 20,
  "data": {
    "algoParam": {
      "areas": {
        "detectLines": [
          [
            [84,93],
            [85,127],
            [85,157],
            [86,191],
            [85,207]
          ],
          [
            [247,60],
            [210,61],

```

```
[167,61],
[132,62],
[91,61]
],
[
[238,211],
[239,202],
[241,145],
[241,124],
[241,102]
],
[
[98,202],
[133,201],
[159,203],
[206,204],
[229,203]
]
],
"lineNames": [
"Door 1",
"Door 2",
"Door 3",
"Door 4"
],
"lineUuids": [
"00000000-aa46-901a-1597-7c24100b4ba16e17",
"00000001-a6a5-58ff-e13d-d882a3a65a68af88",
"c3c568ba-8df6-49f6-8c47-57d6cb51c249",
"19db6f7e-35e0-4cd3-a2a4-340de15c7096"
],
"uturnArea": [
[
[31,59],
[105,63],
[99,223],
[29,221]
],
[
```

```
[52,29],
[52,81],
[279,89],
[278,26]
],
[
[203,81],
[208,234],
[281,239],
[270,81]
],
[
[13,162],
[21,232],
[281,227],
[279,181]
]
]
},
"cascadeConfig" : {
"masterConfig" : {
"masterSettings" : {
"lensParam" : {
"fx" : 164.74299600000001,
"fy" : 164.80600000000001,
"zoom" : 1.1599999999999999
},
"masterDeviceName" : "",
"masterIPAddress" : "",
"masterSN" : ""
},
"slaveSettings" : [
{
"deployHeight" : 3000,
"lensParam" : {
"fx" : 163.49337800000001,
"fy" : 163.44648699999999,
"zoom" : 1.1599999999999999
```

```
    },
    "relativeAngle" : 0,
    "relativeX" : -2368,
    "relativeY" : -1963,
    "slaveDeviceName" : "People Counter",
    "slaveIPAddress" : "192.168.46.80",
    "slavePort" : 80,
    "slaveSN" : "6757D16179950018",
    "status" : 1
  },
  {
    "deployHeight" : 3200,
    "lensParam" : {
      "fx" : 164.927322,
      "fy" : 164.92567399999999,
      "zoom" : 1.1599999999999999
    },
    "relativeAngle" : 0,
    "relativeX" : -2614,
    "relativeY" : -245,
    "slaveDeviceName" : "People Counter",
    "slaveIPAddress" : "192.168.46.83",
    "slavePort" : 80,
    "slaveSN" : "6757D16866970013",
    "status" : 1
  }
]
}
},
"childrenFilterEnable": false,
"childrenFilterThreshold": 1300,
"deploy": {
  "angle": 0,
  "height": 3000
},
"groupCountingEnable": true,
"groupCountingNumMax": 20,
"regionCounting": {
  "enable": false,
```

```
    "regionParam": [],
  },
  "staffDetectSens": 5,
  "staffIdentifyEnable": false,
  "staffIdentifyThreshold": 500,
  "targets": {
    "maxHeight": 2000,
    "minHeight": 1000
  },
  "trackMode": 0,
  "uturnEnable": true
},
"bitrate": 2048,
"encodeType": 0,
"playbackID": 0,
"recordDuration": 1799,
"recordStartTime": "2024-04-12T19:36:52.000",
"recordStartTimestamp": "1712950612000",
"recordStatus": 2,
"taskDuration": 1800,
"taskEnable": true,
"taskName": "Taskname",
"taskStartTime": "2024-04-12T19:36:52.000",
"videoQuality": 0
},
"detail": "ok",
"status": 0,
"transmit_cast": 5
}
```

## 5.2 Set Playback Configuration

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/setPlaybackParam
```

### Request Method:

post

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body:

Parameter	Required	Type	Description
playbackParam	No	object	
taskStartTime	No	string	Format: YYYY-MM-DDTHH:00:00.000
taskDuration	No	number	Unit: second VS133: 1-3600 VS135: 1-14400
taskEnable	No	boolean	
recordCtrl	No	number	0: No record 1: Stop recording 2: Delete record 3: Record now
videoQuality	No	number	0: standard 1: low
bitrate	No	number	
encodeType	No	number	0: H264 1: H265
playbackID	No	number	
taskName	No	string	
operationType	No	number	0: add; 1: delete; 2: modify

**Return JSON parameter description:**

Parameter	Types	Required	Description
command	number	No	
detail	string	No	
status	number	No	1001: configuration error 1002: memory is insufficient to write 1003: over the number limitation of task 1004: over duration limitation 1005: record time range overlap 1006: invalid playback ID
transmit_cast	number	No	

**Request Example:**

```
{
  "playbackParam": {
```

```

"taskStartTime": "2024-04-17T19:36:52.000",
"taskDuration": 60,
"taskEnable": true,
"recordCtrl": 3,
"videoQuality": 0,
"bitrate": 2048,
"encodeType": 0
},
"playbackID": 5,
"taskName": "Taskname",
"operationType": 0
}

```

**Return Example:**

```

{
  "command": 19,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}

```

## 5.3 Get Playback List

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/getPlaybackList
```

**Request Method:**

Post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
-----------	-------	-------------

command	number	Order number
data	object	Return data
playbackListInfo	object[]	
playbackID	integer	
recordDuration	number	Unit: second
recordStartTime	string	
recordStartTimeStamp	string	Unit: millisecond
recordStatus	number	0: Not record 1:Recording 2: Record finish 3.Manual stop 4.abnormal stop 5: Record failure
taskDuration	number	
taskEnable	boolean	
taskStartTime	string	
taskName	string	
playbackListInfo	number	
recordDurationTotal	number	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

**Return Example:**

```
{
  "command": 126,
  "data": {
    "playbackListInfo": [
      {
        "playbackID": 0,
        "recordDuration": 1799,
        "recordStartTime": "2024-04-12T19:36:52.000",
        "recordStartTimeStamp": "1712950612000",
        "recordStatus": 2,
        "taskDuration": 1800,
        "taskEnable": true,
        "taskName": "Taskname",
        "taskStartTime": "2024-04-12T19:36:52.000"
      }
    ]
  }
}
```



```
    },
    {
      "playbackID": 1,
      "recordDuration": 719,
      "recordStartTime": "2024-04-15T02:48:26.000",
      "recordStartTimestamp": "1713149306000",
      "recordStatus": 2,
      "taskDuration": 720,
      "taskEnable": true,
      "taskName": "Taskname",
      "taskStartTime": "2024-04-15T02:48:26.000"
    },
    {
      "playbackID": 2,
      "recordDuration": 298,
      "recordStartTime": "2024-04-16T02:48:31.000",
      "recordStartTimestamp": "1713235711000",
      "recordStatus": 2,
      "taskDuration": 300,
      "taskEnable": true,
      "taskName": "Taskname",
      "taskStartTime": "2024-04-16T02:48:31.000"
    },
    {
      "playbackID": 3,
      "recordDuration": 0,
      "recordStartTime": "1970-01-01T00:00:00.000",
      "recordStartTimestamp": "0",
      "recordStatus": 0,
      "taskDuration": 120,
      "taskEnable": true,
      "taskName": "Taskname",
      "taskStartTime": "2024-04-19T02:48:45.000"
    }
  ],
  "playbackNumber": 4,
  "recordDurationTotal": 2940
},
"detail": "ok",
```

```

"status": 0,
"transmit_cast": 2
}

```

## 5.4 Get Playback Space Status

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/getPlaybackSpaceStatus
```

### Request Method:

Post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	No	
data	object	Yes	
playbackNumber	number	Yes	
recordDurationTotal	number	Yes	Unit: second
isSpaceSufficient	number	Yes	
detail	string	No	
status	number	No	
transmit_cast	number	No	

### Return Example:

```

{
  "command": 127,
  "data": {
    "isSpaceSufficient": true,
    "playbackNumber": 4,
    "recordDurationTotal": 2940
  },
  "detail": "ok",
  "status": 0,
}

```

```
"transmit_cast": 0
```

## 5.5 Get Playback Valid Result

### Request URL:

```
http://192.168.5.220:80/api/v1/counting/getPlaybackResult
```

### Request Method:

post method

### Request JSON parameter description:

#### Headers

Parameter	Required	Value
Content-Type	Yes	application/json

#### Body

Parameter	Type	Required	Value
playbackID	number	Yes	

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	Return data
validFrameData	object[]	
timestamp	string	Timestamps of valid frame
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

### Request Example:

```
{
  "playbackID": 1
}
```

### Return Example:

```
{
  "command": 128,
```

```

"data": {
  "validFrameData": null
},
"detail": "ok",
"status": 0,
"transmit_cast": 0
}

```

## 5.6 Playback Interface (websocket)

### Request URL:

<http://192.168.5.220:80/counting/playback>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
playEnable	boolean	No	True: play, False: pause
playSpeed	number	No	
jumpTime	string	No	Jump timestamps, unit: millisecond
stepCtrl	number	No	0: forward 5s, 1: rollback 5s, 2: next frame, 3: jump to the last frame
sendText	boolean	No	Send json content
download	object	No	
startTime	number	No	Download start time
endTime	number	No	Download end time
pFrameFlag	boolean	No	
retranPercent	number	No	
downloadFullData	object	No	Download all data including algorithm result and tracking lines
startTime	number	No	
endTime	number	No	
pFrameFlag	boolean	No	

retranPercent	number	No	
playbackId	number	No	

**Return JSON parameter description:**

Parameter	Types	Description
result	object	
areas	object[]	people in/out counts from different areas
enter	number	In count
leave	number	Out count
childrenEnter	number	Children in count
childrenLeave	number	Children out count
staffEnter	number	Staff in count
staffLeave	number	Staff out count
line	number	The ID of detection line
groupEnter	number	Group in count
groupLeave	number	Group out count
status	number	1: enable counting, 0: disable counting
timestamp	number	The timestamp of the count
regionCounting	object[]	
index	number	
totalCount	number	Region total counts
staffCount	number	Staff counts
childrenCount	number	Children counts
tracks	object[]	
human	number	0: not the people 1: people
target	Array[]	"target":[[100,120],[100,120]]
personnelType	number	0: Adult 1: staff 2: Child
height	integer	Unit: mm
timestamp	string	Unit: millisecond
type	number	Return content 0: playback, 1: download 2: tracking lines, 3: algoResult
download	object	
percent	number	
playFinish	boolean	True: play finish
playStatus	boolean	True: playing

status	number	0: Success 1001: No recording videos 1002: No valid connection (like video is recording) 1003: No video to download 1004: Not download due to too much download tasks
--------	--------	---

## 6. System

### 6.1 Get Hardware Type

**Request URL:**

<http://192.168.5.220:80/api/v1/system/getHardwareType>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Order number
data	object	Return data
hardwaretype	number	hardwareType 1 indicates the poe version hardwareType 0 indicates the lora version
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

**Return Example:**

```
{
  "command": 21,
  "data": {
    "hardwareType": 0
  }
}
```

```

},
"detail": "ok",
"status": 0,
"transmit_cast": 0
}

```

## 6.2 Get Device Information

### Request URL:

```
http://192.168.5.220:80/api/v1/system/getSystemInfo
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	Return data
deviceName	string	
ethMac	string	PoE only
gdprtipShow	boolean	
hardwareVer	string	
productModel	string	
sn	string	
softwareVer	string	
wlanMac	string	LoRa version only
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time
running_time	string	Unit: s

### Return Example:

```

{
  "command": 58,
  "data": {

```

```

"customizedDeviceID": "001",
"customizedSiteID": "001",
"deviceName": "People_Counter_oem_test",
"ethMac": "24:E1:24:F5:73:16",
"gdprtipShow": false,
"hardwareVer": "V1.2",
"productModel": "oem_test-P",
"runningTime": 170073,
"sn": "6757D32675210018",
"softwareVer": "V_133.1.0.4-r2-a1"
},
"detail": "OK",
"status": 0,
"transmit_cast": 9
}

```

## 6.3 Set Device Information

### Request URL:

<http://192.168.5.220:80/api/v1/system/setSystemInfo>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
deviceName	No	string	New device name
gdprtipShow	No	Boolean	display GDPR or not. True: will display False: won't display

### Request Example:

```

{
  "deviceName": "MS-Tof",
  "gdprtipShow": false
}

```



```
}
}
```

**Return JSON parameter description:**

Parameter	Types	Description
detail	string	Return Information
status	number	Status Value 0: Success

**Return Example:**

```
{
  "command": 59,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 74
}
```

## 6.4 Get OEM Information

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/getOemInfo
```

**Request Method:**

```
post method
```

**Request JSON parameter description:**

```
Headers
```

Parameter	Required	Value
Content-Type	Yes	application/json

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Order number
data	object	
oem	number	the number of oem version
oemload	boolean	oemload Indicates whether the oem is loaded. false indicates that the oem is not loaded. true indicates that the oem is loaded
title	string	tag name
detail	string	
status	number	0: success
transmit_cast	number	Processing time

**Example:**

```
{
  "command": 23,
  "data": {
    "oem": 0,
    "oemload": false,
    "title": "ToF People Counting Sensor"
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 6.5 To Check restart status

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/login
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

**Return JSON parameter description:**

Parameter	Types	Description
command	number	Order number
detail	string	ok
status	number	0 indicates that the restart is complete. You can refresh the page
transmit_cast	number	Processing time

**Example:**

```
{
  "command": 1,
  "detail": "ok",
  "status": 0,
}
```

```
"transmit_cast": 0
```

## 6.6 To Search System Log

### Request URL:

```
http://192.168.5.220:80/api/v1/system/searchLog
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
startTime	Yes	string	Start timestamp, measured in milliseconds
endTime	Yes	string	End timestamp, measured in milliseconds
logType	Yes	number	Log type, 0: Boot log

### Request Example:

```
{
  "startTime": "0",
  "endTime": "1800211081920",
  "logType": 0
}
```

### Return JSON parameter description:

Parameter	Types	Description
command	number	
data	object	
log	Object[]	Item type: object
PowerOnTime	string	Boot time
ShutdownTime	string	Power outage time
detailId	number	
recordCount	number	Number of restarts, maximum display 1000

detail	string	
status	number	
transmit_cast	number	

**Return Example:**

```
{
  "command": 40,
  "data": {
    "log": [
      {
        "PowerOnTime": "2023-11-22T10:35:49+08:00",
        "ShutdownTime": "2023-11-23T14:38:28+08:00",
        "detailId": 1
      },
      {
        "PowerOnTime": "2023-11-23T14:38:58+08:00",
        "ShutdownTime": "2023-11-24T14:13:57+08:00",
        "detailId": 2
      },
      {
        "PowerOnTime": "2023-11-24T14:14:12+08:00",
        "ShutdownTime": "2023-11-24T14:41:15+08:00",
        "detailId": 3
      },
      {
        "PowerOnTime": "2023-11-24T14:41:25+08:00",
        "ShutdownTime": "2023-11-24T15:32:57+08:00",
        "detailId": 4
      },
      {
        "PowerOnTime": "2023-11-24T15:33:09+08:00",
        "ShutdownTime": "2023-11-28T23:28:40+08:00",
        "detailId": 5
      },
      {
        "PowerOnTime": "2023-11-28T23:29:11+08:00",
        "ShutdownTime": "2023-11-28T23:31:45+08:00",
        "detailId": 6
      }
    ]
  }
}
```

```
        "PowerOnTime": "2023-11-28T23:32:10+08:00",
        "ShutdownTime": "2023-11-28T23:32:22+08:00",
        "detailId": 7
    },
    {
        "PowerOnTime": "2023-11-28T23:33:12+08:00",
        "ShutdownTime": "2023-11-28T23:33:54+08:00",
        "detailId": 8
    },
    {
        "PowerOnTime": "2023-11-28T23:34:08+08:00",
        "ShutdownTime": "2023-11-28T23:41:25+08:00",
        "detailId": 9
    },
    {
        "PowerOnTime": "2023-11-28T23:42:11+08:00",
        "ShutdownTime": "2023-11-28T23:42:23+08:00",
        "detailId": 10
    },
    {
        "PowerOnTime": "2023-11-28T23:43:10+08:00",
        "ShutdownTime": "2023-11-28T23:44:32+08:00",
        "detailId": 11
    }
],
    "recordCount": 11
},
    "detail": "ok",
    "status": 0,
    "transmit_cast": 4
}
```

## 6.7 Get Device Time

### Request URL:

```
http://192.168.5.220:80/api/v1/system/getTime
```

### Request Method:

```
post method
```

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Description
data	object	Return data
day	number	
hour	number	
min	number	
month	number	
sec	number	
usec	number	
year	number	
detail	string	Return Information
status	number	Status Value 0: Success Other: Failed

**Return Example:**

```
{
  "command": 123,
  "data": {
    "day": 25,
    "hour": 3,
    "min": 27,
    "month": 4,
    "sec": 24,
    "usec": 880,
    "year": 2023
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 6.8 Set Device Time

### Request URL:

<http://192.168.5.220:80/api/v1/system/setTime>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
year	Yes	number	Years
month	Yes	number	Months
day	Yes	number	Days
hour	Yes	number	Hours
min	Yes	number	Minutes
sec	Yes	number	Seconds
usec	Yes	number	$\mu$ s

### Request Example:

```
{
  "command": 123,
  "data": {
    "day": 25,
    "hour": 3,
    "min": 27,
    "month": 4,
    "sec": 24,
    "usec": 880,
    "year": 2023
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 6.9 Get NTP Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/system/getNtpparam>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	Return data
enabled	string	
server_addr	string	
server_port	number	
time_zone	number	
update_cycle	number	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

### Return Example:

```
{
  "command": 13,
  "data": {
    "enabled": "true",
    "server_addr": "pool.ntp.org",
    "server_port": 123,
    "time_zone": 14,
    "update_cycle": 1440
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```



## 6.10 Set NTP Configuration

### Request URL:

```
http://192.168.5.220:80/api/v1/system/setNtpparam
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
NtpParam	No	object	
enabled	No	boolean	
server_addr	No	string	
server_port	No	number	
time_zone	No	string	
update_cycle	No	number	

### Request Example:

```
{
  "NtpParam":
  {
    "enabled": false,
    "server_addr": "abc.com",
    "server_port": 124,
    "time_zone": 39,
    "update_cycle": 60
  }
}
```

### Return Example:

```
{
  "command": 14,
  "detail": "recv data parse error",
  "status": -1,
  "transmit_cast": 0
}
```

## 6.11 Get Remote Platform

### Request URL:

<http://192.168.5.220:80/api/v1/system/getRemotePlatform>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	Return data
enable	boolean	
status		
platform Type		0: ms IoT Developer Platform 1: Devicehub v2.0 2: Devicehub v1.0
devhubConfig		
devhubEnable	boolean	
servername	string	Server address
method	number	0 :Authorization code; 1 :Account password
username	string	
password	string	
authcode	string	
iotDevConfig	object	
autoProvision	boolean	
dataTransfer	boolean	
onTheDotMin	integer	
periodMode	integer	0: On the Dot 1: from now on
periodIntervalMin	integer	
triggerEnable	boolean	
devhubConfigV2	object	
enable	boolean	

servername	string	Server address
syncDeviceName	boolean	
syncCustomizedID	boolean	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

**Return Example:**

```
{
  "command": 63,
  "data": {
    "devhubConfig": {
      "authcode": "",
      "devhubEnable": false,
      "method": 1,
      "password": "Nancy.5599",
      "servername": "devicehub.milesight-iot.com",
      "username": "nancy@ursalink.com"
    },
    "devhubConfigV2": {
      "enable": true,
      "servername": "192.168.45.13",
      "syncDeviceName": true,
      "usingCustomizedID": true
    },
    "enable": true,
    "iotDevConfig": {
      "autoProvision": false,
      "dataTransfer": false,
      "onTheDotMin": 60,
      "periodIntervalMin": 10,
      "periodMode": 0,
      "triggerEnable": false
    },
    "platformType": 1,
    "status": 1
  },
  "detail": "ok",
  "status": 0,
}
```

```
"transmit_cast": 1
```

## 6.12 Set Remote Platform

### Request URL:

```
http://192.168.5.220:80/api/v1/system/setRemotePlatform
```

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
enable	No	boolean	
platformType	No	integer	0: MS IoT Developer Platform 1: Devicehub v2.0 2: Devicehub v1.0
devhubConfig	No	Object	
devhubEnable	No	boolean	True: connect, false: disconnect
servername	No	string	DeviceHub Sever Address
method	No	number	0: By Authentication Code 1: By user account
username	No	string	Account username
password	No	string	Account password
authcode	No	string	DeviceHub Authentication Code
iotDevConfig	No	Object	
autoProvision	No	boolean	
dataTransfer	No	boolean	
periodMode	No	boolean	0: On the Dot 1: From now
onTheDotMin	No	integer	
periodIntervalMin	No	integer	When choose From Now,need configure it

triggerEnable	No	boolean	
devhubConfigV2		object	
enable		boolean	True: connect, false: disconnect
servername		string	DeviceHub Sever Address
syncDeviceName		boolean	
syncCustomizedID		boolean	

**Request Example:**

```
{
  "devhubConfig": {
    "authcode": "YWNIZTcxZTcyNjViZTU4Y2I2YzU3YzcyOTU0M2Q1NDY=",
    "devhubEnable": true,
    "method": 1,
    "password": "nancy.123",
    "servername": "192.168.45.14",
    "username": "nancy@milesight.com"
  },
  "enable": true,
  "iotDevConfig": {
    "autoProvision": false,
    "dataTransfer": false,
    "onTheDotMin": 60,
    "periodIntervalMin": 10,
    "periodMode": 0,
    "triggerEnable": false
  },
  "platformType": 0
}
```

## 6.12 Get WebHttp Config

**Request URL:**

<http://192.168.5.220:80/api/v1/system/setWebHttpConfig>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
-----------	----------	-------

Content-Type	Yes	application/json
--------------	-----	------------------

**Return JSON parameter description:**

Parameter	Types	Description
data	object	
webHttp	object	
enable	boolean	0: close 1: open
port	integer	
webHttps	object	
port	integer	Range: 1~65535
certificateType	string	Self-signed CA signed
certificateData	object	
country	string	
state	string	
locality	string	
organization	string	
commonName	string	
validityPeriodStart	string	
organizationUnit	string	
commonName	string	
validityPeriodStart	string	
validityPeriodEnd	string	
detail	string	
status	number	

**Request Example:**

```
{
  "command": 213,
  "data": {
    "webHttp": {
      "enable": true,
      "port": 80
    },
    "webHttps": {
      "certificateData": {
        "commonName": "People Counter",
        "country": "US",
        "locality": "Some Location",
        "organization": "Internet Widgits Pty Ltd",

```

```

        "organizationUnit": "Internet Widgits Pty Ltd",
        "state": "Some State",
        "validityPeriodEnd": "Oct 27 03:27:13 2024 GMT",
        "validityPeriodStart": "Sep 26 03:27:13 2023 GMT"
    },
    "certificateType": 0,
    "port": 443
}
},
"detail": "OK",
"status": 0,
"transmit_cast": 10
}

```

## 6.13 Set WebHttp Config

### Request URL:

<http://192.168.5.220:80/api/v1/system/setDeviceHub>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

Body

Parameter	Types	Required	Description
webHttp	object	No	
enable	boolean	No	0: close 1: open
port	integer	No	
webHttps	object	No	
port	integer	No	Range: 1~65535
certificateType	string	No	0: Self-signed 1: CA signed
certificateData	object	No	
country	string	No	
state	string	No	

locality	string	No	
organization	string	No	
organizationUnit	string	No	
commonName	string	No	
validityPeriodStart	string	No	
commonName	string	No	
validityPeriod	string	No	

**Request Example:**

```
{
  "webHttp":{"enable":0}
}
```

## 6.14 Get DST Time

**Request URL:**

<http://192.168.5.220:80/api/v1/system/getDst>

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

**Return JSON parameter description:**

Parameter	Types	Required	Description
command			
data	object	Yes	
dstBias	number	Yes	Offset time, default value is 60 Option: 30, 60, 90, 120
enabled	boolean	Yes	true: Enable false: Disable
start	object	Yes	
month	number	Yes	Month value: 1~12
mWeek	number	Yes	Week number: 1~5
wDay	number	Yes	Day of this Weekday: 0~6, means Sunday to Saturday
time	number	Yes	The Unit of time value is minute, so



			when time is "01:00", time value is 60
end	object	Yes	
month	number	Yes	Month value: 1~12
mWeek	number	Yes	Week number: 1~5
wDay	number	Yes	Day of this Weekday: 0~6, means Sunday to Saturday
time	number	Yes	The Unit of time value is minute, so when time is "01:00", time value is 60
detail			
status	number	No	
Tansmit_cast	number	No	Time zone, which is same with ntp interface value

**Return Content Example:**

```
{
  "command": 206,
  "data": {
    "dstBias": 60,
    "enabled": true,
    "end": {
      "mWeek": 5,
      "month": 10,
      "time": 180,
      "wDay": 0
    },
    "start": {
      "mWeek": 5,
      "month": 3,
      "time": 120,
      "wDay": 0
    },
    "time_zone": 8
  },
  "detail": "OK",
  "status": 0,
  "transmit_cast": 1
}
```

## 6.15 Set DST Time

### Request URL:

<http://192.168.5.220:80/api/v1/system/setDst>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
dstParam	object	Yes	
enabled	boolean	Yes	true: Enable false: Disable
start	object	Yes	
month	number	Yes	Month value: 1~12
mWeek	number	Yes	Week number: 1~5
wDay	number	Yes	Day of this Weekday: 0~6, means Sunday to Saturday
time	number	Yes	The Unit of time value is minute, so when time is "01:00", time value is 60
end	object	Yes	
month	number	Yes	Month value: 1~12
mWeek	number	Yes	Week number: 1~5
wDay	number	Yes	Day of this Weekday: 0~6, means Sunday to Saturday
time	number	Yes	The Unit of time value is minute, so when time is "01:00", time value is 60
dstBias	number	Yes	Offset time, default value is 60 Option: 30, 60, 90, 120
Time_zone	number	Yes	Time zone, which is same with ntp interface value

### Request Body Example:

```
{
  "dstParam": {
```

```

"enabled": true,
"start": {
  "month": 3,
  "mWeek": 5,
  "wDay": 0,
  "time": 120
},
"end": {
  "month": 10,
  "mWeek": 5,
  "wDay": 0,
  "time": 180
},
"dstBias": 60,
"time_zone": 8
}

```

## 6.16 Get Security Service

### Request URL:

<http://192.168.5.220:80/api/v1/system/getSecurityService>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	Yes	
data	object	Yes	
ssh	object	Yes	
enable	boolean	Yes	
port	number	Yes	
detail	string	Yes	
status	number	Yes	

Transmit_cast	number	Yes	
---------------	--------	-----	--

**Return Example:**

```
{
  "command": 26,
  "data": {
    "ssh": {
      "enable": true,
      "port": 22
    }
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```

## 6.17 Set Security Service

**Request URL:**

<http://192.168.5.220:80/api/v1/system/setSecurityService>

**Request Method:**

post method

**Request JSON parameter description:**

## Headers

Parameter	Required	Value
Content-Type	Yes	application/json

## Body

Parameter	Types	Required	Description
ssh	object	No	
enable	boolean	No	
port	number	No	

**Return JSON parameter description:**

Parameter	Types	Required	Description
command	number	Yes	
detail	string	Yes	
status	number	Yes	

Transmit_cast	number	Yes	
---------------	--------	-----	--

## 6.18 Get LLDP Parameter

Only VS13x-P supports LLDP feature.

### Request URL:

<http://192.168.5.220:80/api/v1/system/getLldpParam>

### Request Method:

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

### Return JSON parameter description:

Parameter	Types	Description
command	number	Order number
data	object	Return data
enable	boolean	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

### Return Example:

```
{
  "command": 32,
  "data": {
    "lldpParam": {
      "enable": true
    }
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}
```

## 6.19 Set LLDP Parameter

Only VS13x-P supports LLDP feature.

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/setNtpparam
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
lldpParam	No	object	
enable	No	boolean	

**Request Example:**

```
{
  "lldpParam": {
    "enabled": true
  }
}
```

## 7. System/Maintenance

### 7.1 Reboot device

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/reboot
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded

## 7.2 Reset Configuration

Resetting device parameters requires sending the following two APIs:

Set camera info:

**Request URL:**

```
http://192.168.5.220:80/api/v1/counting/restoreDefault
```

**Request Method:**

post method

**Request JSON parameter description:**

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Required	Types	Description
type	Yes	string	basic:-Simple reset ; all-Full reset

**Request Example:**

```
{
  "type": "basic"
}
```

## 7.3 Reset Device

**Request URL:**

```
http://192.168.5.220:80/api/v1/system/resetConfig
```

**Note:** All configuration will be reset and an automatic reboot will occur after a successful reset from version V\_133.1.0.5.

**Request Method:**

post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Description
type	string	basic:basic recovery ; all: all recovery <b>Note:</b> All recovery needs entering the username and password, while the basic recovery does not.
password	string	MD5(Message Digest Algorithm) of the current login password
username	string	MD5(Message Digest Algorithm) of the current login username

### Return JSON parameter description:

Parameter	Types	Required	Description
command	number	No	
detail	string	No	
status	number	No	Returned status. 0: success 1001: incorrect username or password
transmit_cast	number	No	

## 7.4 Get ToF Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/getCameraInfo>

### Request Method:

Post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/x-www-form-urlencoded



**Return JSON parameter description:**

Parameter	Types	Required	Description
command	number	No	
data	object	No	
cameraBinExist	boolean	No	To judge if the bin file has been uploaded
cameraId	string	No	
cameraId16	string	No	
confidenceSwitch	number	No	ToF Noise Filtering, 0: disable, 1: enable
confidenceValue	number	No	Noise Filtering Level
tofLightingMode	number	No	0: Auto (VS135 Only) 1: Always On 2: Schedule
scheduleStartTime	integer	No	Unit: minute
scheduleEndTime	integer	No	Unit: minute
sensorTemp	integer	No	Temperature of ToF sensor
filterEnable	boolean	No	
tiltCorrectionEn	integer	No	VS135 Only, 0: disable, 1: enable
illuminationTemp	integer	No	Temperature of light
workFreq	number	No	Work frequency: 0 ,1, 2, 3
workFreqLists	object	No	
0	string	No	Modulation Mode A (99 MHz+18 MHz)
1	string	No	Modulation Mode B (96 MHz+17 MHz)
2	string	No	Modulation Mode C (97 MHz +17 MHz)
3	string	No	Modulation Mode D (101 MHz +18 MHz)
detail	string	No	
status	number	No	
transmit_cast	number	No	

**Return Example:**

```
{
  "command": 8,
  "data": {
    "cameraBinExist": false,
    "cameraId": "13090514",
    "cameraId16": "0060046213090514",
    "confidenceSwitch": 1,
    "confidenceValue": 2,
    "illuminationTemp": 54,
    "scheduleEndTime": 1320,
```

```

    "scheduleStartTime": 540,
    "sensorTemp": 63,
    "tofLightingMode": 1,
    "workFreq": 0,
    "workFreqLists": {
      "0": "Modulation Mode A",
      "1": "Modulation Mode B",
      "2": "Modulation Mode C",
      "3": "Modulation Mode D"
    }
  },
  "detail": "ok",
  "status": 0,
  "transmit_cast": 1
}

```

## 7.5 Set ToF Configuration

### Request URL:

<http://192.168.5.220:80/api/v1/counting/setCameraInfo>

### Request Method:

Post method

### Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
cameraParam	object	No	
workFreq	number	Yes	Configure the frequency of ToF 0 : Modulation Mode A(99 MHz+18 MHz), 1 : Modulation Mode B(96 MHz+17 MHz) 2 : Modulation Mode C(97 MHz +17 MHz) 3: Modulation Mode D(101 MHz +18 MHz)

tofLightingMode	number	No	0: Auto (VS135 Only) 1: Always On 2: Schedule
scheduleStartTime	integer	No	Unit: minute
scheduleEndTime	integer	No	Unit: minute
tiltCorrectionEn	integer	No	VS135 Only, 0: disable, 1: enable
confidenceSwitch	number	No	ToF Noise Filtering, 0: disable, 1: enable
confidenceValue	number	No	Noise Filtering Level
filterEnable	boolean	No	

**Request Example:**

```
{
  "cameraParam": {
    "workFreq": 1
  },
  "tofLightingMode": 1
}
```

**Return Example:**

```
{
  "command": 17,
  "detail": "ok",
  "status": 0,
  "transmit_cast": 0
}
```