



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
2025-02-21	VS13x_1.0.8	Log file, Ping detection, Exclusion Region, Tailgating Direction, LoRa Time, HTTPs Certificate upload, System Info update, People Counting Configuration update, Recipient Configuration update, Delete http

Table of Contents

Overview	5
Permission level	5
1. Dashboard	6
1.1 Live Preview Interface (websocket)	6
1.2 Get Preview Image Parameters	8
1.3 Set Preview Image Parameters	10
1.4 Get Web Display	11
1.5 Set Web Display	13
2. Rule	14
2.1 Get one ToF Image	14
2.2 Get People Counting Configuration	15
2.3 Set People Counting Configuration	19
2.4 Get DI/DO Configuration	23
2.5 Set DI/DO Configuration	25
2.6 Reset People Counting Results	28
2.7 Get installation Height	29
2.8 Search Devices	30
2.9 Get Search Device Lists	30
2.10 Get Multi-devices Bind Method (VS135 Series Only)	32
2.11 Set Multi-devices Bind Method (VS135 Series Only)	33
2.12 Get Multi-devices Configuration	33
2.13 Set Multi-devices Configuration	36
2.14 Request Frames from Node Devices	38
2.15 Get Multi-devices Image	39
2.16 Get Tailgating Detection Configuration	41
2.17 Set Tailgating Detection Configuration	42
3. Communication	44
3.1 Get Network Configuration	44
3.2 Set Network Configuration	45
3.3 IP conflict detection test	47
3.4 Get Recipient Configuration	48
3.5 Set Recipient Configuration	52
3.6 Get Recipient List	58
3.7 Get Net Report Status	59
3.8 Update Net Report Status	60
3.9 Get 802.1X Configuration	61
3.10 Set 802.1X Configuration	62

3.11 Import 802.1x Certification File	63
3.12 Get OpenVPN Configuration	64
3.13 Set OpenVPN Configuration	65
3.14 Import OpenVPN File	66
3.15 Report System Status (websocket)	67
3.16 Get BACnet Object	67
3.17 Set BACnet Object	69
3.18 Get WiFi List (VS135 Series Only)	70
3.19 Search WiFi List (VS135 Series Only)	72
3.20 Get WiFi Information (STA) (VS135 Series Only)	72
3.21 Set WiFi Information (STA) (VS135 Series Only)	73
3.22 Set WiFi Configuration	74
3.23 Set Halow WiFi Configuration (VS135-HL Only)	76
4. Report	77
4.1 Get DataRecord from Database	77
4.2 Get Counting Record Result	79
5. Validation	81
5.1 Get Playback Configuration	81
5.2 Set Playback Configuration	86
5.3 Get Playback List	88
5.4 Get Playback Space Status	90
5.5 Get Playback Valid Result	91
5.6 Playback Interface (websocket)	92
6. System	95
6.1 Get Hardware Type	95
6.2 Get Device Information	96
6.3 Set Device Information	97
6.4 Get OEM Information	98
6.5 To Check restart status	99
6.6 To Search System Log	100
6.7 Get Device Time	103
6.8 Set Device Time	104
6.9 Get NTP Configuration	105
6.10 Set NTP Configuration	106
6.11 Get Remote Platform	107
6.12 Set Remote Platform	109
6.12 Get WebHttp Config	110
6.13 Set WebHttp Config	112
6.14 Get DST Time	113

6.15 Set DST Time	114
6.16 Get Security Service	116
6.17 Set Security Service	117
6.18 Get LLDP Parameter	118
6.19 Set LLDP Parameter	119
7. System/Maintenance	121
7.1 Reboot device	121
7.2 Reset Configuration	121
7.3 Reset Device	122
7.4 Get ToF Configuration	123
7.5 Set ToF Configuration	125

Overview

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

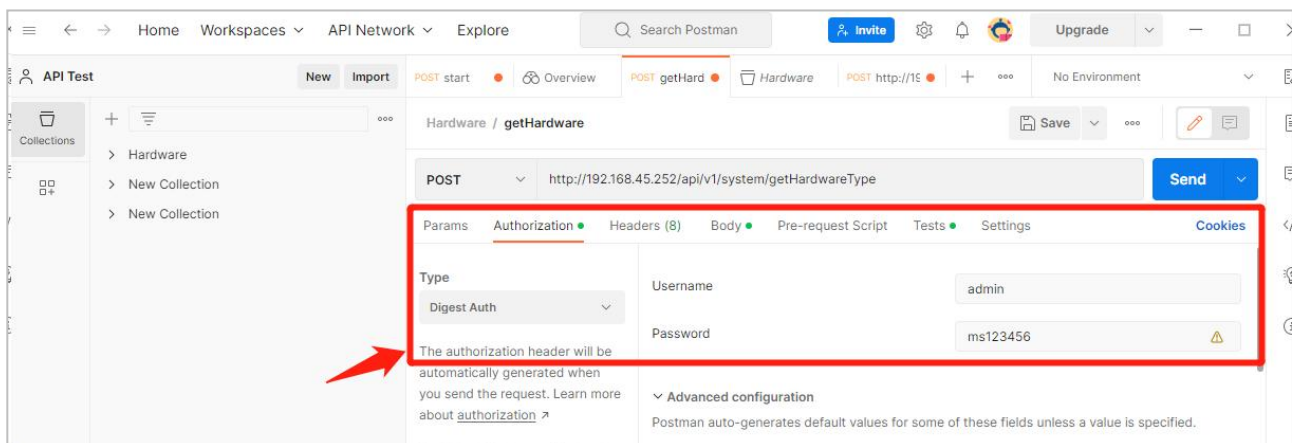
Permission level

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
localTracksEn	boolean	Yes	

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	
localTracks	object[]	
human	number	0: non-human 1: human
target	object[]	"target":[[100,120],[100,120]]
height	integer	Unit: mm
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:

```
{
  "action": "transmit",
  "message": "result",
  "result": {
    "alarmIn": 0,
    "areas": [
      {
        "childrenEnter": 0,
        "childrenLeave": 0,
        "enter": 204,
        "groupEnter": 0,
        "groupLeave": 0,
        "leave": 274,
        "line": 1,
        "staffEnter": 0,
        "staffLeave": 0
      }
    ],
    "status": 1,
    "timestamp": 1739948664
  },
  "status": 0,
  "tofLightStatus": true
}
```

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": true,  
        "includeStaff": true,  
        "showCapacity": true,  
        "line": 1,  
        "regionParam": [  
          {  
            "includeChild": true,  
            "includeStaff": true,  
            "index": 1,  
            "detail": "1",  
            "status": 1,  
            "transmit_cast": 1  
          }  
        ],  
        "transmit_cast": 1  
      }  
    ]  
  }  
}
```

```
{
  "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	
lineUids	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	
staffIdentifyEnable	boolean	No	
staffDetectSens	number	No	
targets	object	No	Height range of targets
maxHeight	number	No	Maximum height
minHeight	number	No	Minimum height
trackMode	number	No	
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	
groupIndividualFilter	boolean	Yes	
groupCountingNumMin	string	Yes	
shoppingCartDetectEn	boolean	No	0:close, 1:open
maxCartBasketHeight	number	No	
miniCartBasketHeight	number	No	
detectionMode	integer	No	0: Depth, 1: monochrome
exclusionRgnEnable	boolean	Yes	
exclusionRegion	object[]	No	
coordinate	object[]	Yes	
x	integer	Yes	
y	integer	Yes	
type	integer	Yes	0: Height Exclusion 1:Detection Exclusion
index	string	Yes	
occlusionConf	object[]	No	
enable	boolean	No	
sensitivityLevel	integer	No	2-10
proportion	integer	No	10-90
blockDuration	integer	No	
occlusionDist	integer	Yes	
detail	string	No	
status	number	No	
transmit_cast	number	No	

Return Example:

```
{
  "command" : 104,
  "data" : {
    "areas" : {
      "detectLines" : [
        [
          [ 320, 120 ],
          [ 240, 120 ],
          [ 160, 120 ],
          [ 80, 120 ],
```

```
[ 0, 120 ]
],
[],
[],
[]
],
"lineNames" : [ "Line1", "", "", "" ],
"lineUuids" : [ "b355c865-9a5e-4fd4-ac2e-39a79ae99eb2", "", "", "" ],
"uturnArea" : [
  [
    [ 0, 60 ],
    [ 320, 60 ],
    [ 320, 180 ],
    [ 0, 180 ]
  ],
  [],
  [],
  []
]
},
"childrenFilterEnable" : false,
"childrenFilterThreshold" : 1300,
"deploy" : {
  "angle" : 0,
  "height" : 6002
},
"detectionMode" : 0,
"exclusionRegion" : [],
"exclusionRgnEnable" : false,
"groupCountingEnable" : false,
"groupCountingNumMax" : 20,
"groupCountingNumMin" : 2,
"groupIndividualFilter" : false,
"heatmapEnable" : false,
"maxCartBasketHeight" : 750,
"miniCartBasketHeight" : 450,
"occlusionConf" : {
  "blockDuration" : 5,
  "enable" : false,
```

```
{
  "occlusionDist" : 100,
  "proportion" : 50,
  "sensitivityLevel" : 2
},
"regionCounting" : {
  "enable" : false,
  "regionParam" : []
},
"resetCumulativeInfo" : {
  "enable" : false,
  "time" : 0,
  "wDay" : 7
},
"shoppingCartDetectEn" : false,
"staffDetectSens" : 5,
"staffIdentifyEnable" : false,
"staffIdentifyThreshold" : 500,
"targets" : {
  "maxHeight" : 2000,
  "minHeight" : 1000
},
"trackMode" : 0,
"uturnEnable" : true
},
"detail" : "ok",
"status" : 0,
"transmit_cast" : 2
}
```

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
exclusionRgnEnable	boolean	Yes	
exclusionRegion	object[]	No	
coordinate	object[]	Yes	
x	integer	Yes	
y	integer	Yes	
type	integer	Yes	0: Height Exclusion 1:Detection Exclusion
index	string	Yes	
occlusionConf	object[]	No	
enable	boolean	No	
sensitivityLevel	integer	No	2-10
proportion	integer	No	10-90
blockDuration	integer	No	
occlusionDist	integer	Yes	
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	
groupIndividualFilter	boolean	Yes	
groupCountingNumMin	string	Yes	
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 Series 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 Series 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	
exclusionRegion	object	
coordinate	object	
x	integer	
y	integer	

type	number	0: Detection Exclusion 1: Height Exclusion
index	integer	
occlusionConf	object[]	
enable	boolean	
sensitivityLevel	integer	
proportion	integer	
blockDuration	integer	
occlusionDist	integer	
detail	string	
status	number	
Transmit_cast	number	

Return Content Example:

```
{
  "command": 122,
  "data": {
    "cascadeMode": 1,
    "masterConfig": {
      "masterSettings": {
        "lensParam": {
          "fx": 168.098846000000001,
          "fy": 168.090271,
          "zoom": 1.1599999999999999
        },
        "workFreq": 0,
        "masterDeviceName": "People Counter",
        "masterIPAddress": "192.168.5.220",
        "masterSN": "6767E21888890021"
      },
      "slaveSettings": [
        {
          "deployHeight": 1300,
          "lensParam": {
            "fx": 168.098846000000002,
            "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	
exclusionRegion	object[]	No	
coordinate	object	Yes	
x	integer	Yes	
y	integer	Yes	
type	number	Yes	
index	integer	Yes	
occlusionConf	object[]	No	
enable	boolean	No	
sensitivityLevel	integer	No	2-10
proportion	integer	No	10-90
blockDuration	integer	No	
occlusionDist	integer		

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/requsetFrameFromSlave
```

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/4AAQSkZJRgABAQAAQABAAAD/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	
tailgatingEnable	boolean	
currentStatus	integer	0: low, 1: high
triggerMode	integer	0: low, 1: high
triggerValidityPeriod	integer	Unit: s, range: 1-60
detectLine	integer	DETECT_LINE_1 = 0, DETECT_LINE_2 = 1, DETECT_LINE_3 = 2, DETECT_LINE_4 = 3,
outputPulseWidth	integer	
tailDirection	number	0: in 1:out 2:both default:2
Detail	string	
status	number	0: success
transmit_cast	number	Processing time

Return Example:

```
{
  "command": 129,
  "data": {
    "currentStatus": 0,
    "detectLine": 1,
    "outputPulseWidth": 100,
    "tailDirection": 2,
    "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
tailDirection	number	No	0: in 1:out 2:both

			default: 2
--	--	--	------------

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
}
```

2.18 Import HTTPS certificate

Request URL:

<http://192.168.5.220:80/api/v1/dataload/upload/httpsCert>

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	0: Success, 1501: Certificate format error.
Transmit_cast	number	

Return Content Example:

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

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	
countingReportCtrl	boolean	
cooldownPeriod	integer	
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	
tofOcclusionTrigger	integer	
nodeDeviceInfo	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  
        },  
        "httpConfig" : {  
          "password" : 0,  
          "targetUrl" : "",  
          "username" : ""  
        },  
        "mqttConfig" : {  
          "certificateType" : 0,  
          "clientCertExist" : false,  
          "clientId" : "",  
          "clientKeyExist" : false,  
          "host" : "",  
          "password" : 0,  
          "qos" : 0,  
          "rootCertExist" : false,  
          "tlsEnable" : false,  
          "topic" : "",  
          "username" : ""  
        }  
      }  
    }  
  }  
}
```

```
        "reportProtocol" : 2
    },
    "recipientID" : 0,
    "recipientName" : "Recipient",
    "reportStrategy" : {
        "alarmDataEnable" : 1,
        "cooldownPeriod" : 5,
        "countingReportCtrl" : false,
        "customizeDeviceInfo" : 511,
        "customizeReportEnable" : false,
        "customizeTimeInfo" : 63,
        "dataRetransmissionEnable" : false,
        "linePeriodicDataEnable" : 1,
        "lineRegionNameEnable" : 1,
        "lineRegionUuidEnable" : 1,
        "lineTotalData" : 3,
        "lineTriggerDataEnable" : 1,
        "networkInfo" : 31,
        "nodeDeviceInfo" : 0,
        "onTheDotMin" : 60,
        "periodEnable" : true,
        "periodIntervalMin" : 10,
        "periodMode" : 0,
        "regionPeriodicDataEnable" : 1,
        "regionTriggerData" : 7,
        "tofOcclusionTrigger" : 1,
        "triggerEnable" : true
    }
},
"detail" : "ok",
"status" : 0,
"transmit_cast" : 3
}
```

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	
countingReportCtrl	boolean		
cooldownPeriod	integer		
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	
tofOcclusionTrigger	integer		
nodeDeviceInfo	integer		
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:

```
{
  "recipientConfig": {
    "protocolSetting": {
      "mqttConfig": {
        "certificateType": 0,
        "clientCertExist": false,
        "clientId": "",
        "clientKeyExist": false,
        "host": "test",
        "password": "",
        "port": 80,
        "qos": 0,
        "rootCertExist": false,
        "tlsEnable": false,
        "topic": "testTopic",
        "username": ""
      },
      "httpConfig": {
        "targetUrl": "",
        "username": "",
        "password": ""
      },
      "bacnetConfig": {
        "udpPort": 47808,
        "deviceId": null,
        "deviceName": "",
        "bbmdEnable": false,
        "bbmdIpAddress": "",
        "bbmdPort": null,
        "timeToAlive": 3600
      }
    }
  }
}
```

```
    },
    "reportProtocol": 2
  },
  "reportStrategy": {
    "countingReportCtrl": false,
    "cooldownPeriod": 5,
    "periodEnable": true,
    "triggerEnable": true,
    "periodMode": 0,
    "onTheDotMin": 60,
    "periodIntervalMin": 10,
    "dataRetransmissionEnable": false,
    "customizeReportEnable": false,
    "customizeDeviceInfo": 511,
    "networkInfo": 31,
    "customizeTimeInfo": 63,
    "lineTriggerDataEnable": 1,
    "regionTriggerData": 7,
    "linePeriodicDataEnable": 1,
    "lineTotalData": 3,
    "regionPeriodicDataEnable": 1,
    "lineRegionNameEnable": 1,
    "lineRegionUuidEnable": 1,
    "alarmDataEnable": 1,
    "tofOcclusionTrigger": 1,
    "nodeDeviceInfo": 0
  },
  "recipientID": 1,
  "recipientName": "Recipient"
},
"method": 1,
"recipientID": 1
}
```

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/secrityServiceCert>

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 Series 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 Series 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 Series 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 Series 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 Hallow 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: Nework segment conficts with TCP/IP 1123: Nework segment conficts with WiFi Halow gateway IP 1124: Nework segment conficts with WLAN IP 1125: Nework segment conficts 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: Nework segment conficts with TCP/IP 1122: Nework segment conficts with WLAN IP 1124: Nework segment conficts 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
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	
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	
exclusionRgnEnable	boolean	
exclusionRegion	object	
coordinate	object	
x	integer	
y	integer	
type	number	0: Detection Exclusion 1: Height Exclusion
index	integer	
taskName	string	
videoQuality	number	0: standard 1: low
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	
bitrate	number	
encodeType	number	0: H264 1: H265
playbackID	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" : [
          [
            [ 320, 120 ],
            [ 240, 120 ],
            [ 160, 120 ],
            [ 80, 120 ],
            [ 0, 120 ]
          ],
          [],
          [],
          []
        ],
        "lineNames" : [ "Line1", "", "", "" ],

```

```
"lineUids" : [ "b355c865-9a5e-4fd4-ac2e-39a79ae99eb2", "", "", "" ],
"uturnArea" : [
  [
    [ 0, 60 ],
    [ 320, 60 ],
    [ 320, 180 ],
    [ 0, 180 ]
  ],
  [],
  [],
  []
],
},
"childrenFilterEnable" : false,
"childrenFilterThreshold" : 1300,
"deploy" : {
  "angle" : 0,
  "height" : 6002
},
"exclusionRegion" : [],
"exclusionRgnEnable" : false,
"groupCountingEnable" : false,
"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" : 0,
  "recordStartTime" : "1970-01-01T00:00:00.000",
  "recordStartTimestamp" : "0",
  "recordStatus" : 3,
  "taskDuration" : 60,
  "taskEnable" : true,
  "taskName" : "Taskname",
  "taskStartTime" : "2025-02-19T06:35:26.703",
  "videoQuality" : 0
},
"detail" : "ok",
"status" : 0,
"transmit_cast" : 2
}
```

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
customizedDeviceID	string	
customizedSiteID	string	
runningTime	number	Unit: s
ledSwitch	boolean	
detail	string	Return Information
status	number	Status Value 0: Success
transmit_cast	number	Processing time

Return Example:

```
{
  "command" : 58,
  "data" : {
    "customizedDeviceID" : "",
```

```
{
  "customizedSiteID" : "",
  "deviceName" : "People Counter",
  "ethMac" : "00:16:28:8E:06:A7",
  "gdprtipShow" : true,
  "hardwareVer" : "V1.1",
  "ledSwitch" : true,
  "productModel" : "VS135-P-High",
  "runningTime" : 171690,
  "sn" : "6767D17581540027",
  "softwareVer" : "V_135.1.0.8",
  "wlanMac" : "00:16:28:8E:06:A8"
},
"detail" : "OK",
"status" : 0,
"transmit_cast" : 4
}
```

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	Yes	string	New device name
gdprtipShow	Yes	boolean	display GDPR or not. True: will display False: won't display
customizedDeviceID	Yes	string	
customizedSiteID	Yes	string	

ledSwitch	No	boolean	
-----------	----	---------	--

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	μ 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/getWebHttpConfig
```

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	
webHttps	object	
port	integer	Range: 1~65535
certificateType	integer	Self-signed CA signed
certificateName	string	
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:

```
{
  "data": {
    "webHttps": {
      "port": 0,
      "certificateType": "string",
      "certificateName": "string",
      "certificateData": {
        "country": "string",
        "state": "string",
```

```
        "locality": "string",
        "organization": "string",
        "organizationUnit": "string",
        "commonName": "string",
        "validityPeriodStart": "string",
        "validityPeriodEnd": "string"
    }
},
"detail": "string",
"status": 0
}
```

6.13 Set 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/x-www-form-urlencoded

Body

Parameter	Types	Required	Description
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:

```
{
  "webHttps":{"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/setSecyurityService>

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
  }
}
```

6.20 Get LoRaTime Configuration

Request URL:

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

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	
gatewaySync	boolean	
syncInterval	integer	
Detail	string	
status	number	0: success
transmit_cast	number	Processing time

Return Example:

```
{
  "data": {
    "gatewaySync": true,
    "syncInterval": 0
  },
  "detail": "string",
  "status": 0,
  "transmit_cast": 0
}
```

6.21 Set LoRaTime Configuration

Request URL:

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

Request Method:

post method

Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
gatewaySync	boolean	Yes	
syncInterval	integer	Yes	

Request Body Example:

```
{
  "gatewaySync": true,
  "syncInterval": 7
}
```

Return Example:

```
{  
  "command": 14,  
  "detail": "ok",  
  "status": 0,  
  "transmit_cast": 0  
}
```

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 Note: 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
}
```

7.6 Export log files

Request URL:

<http://192.168.5.220:80/api/v1/dataload/download/logFile>

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
detail	string	No	
status	number	No	

Return Example:

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

7.7 Ping Configuration

Request URL:

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

Request Method:

Post method

Request JSON parameter description:

Headers

Parameter	Required	Value
Content-Type	Yes	application/json

Body

Parameter	Types	Required	Description
host	string	Yes	
operate	integer	Yes	0: Check if a query is currently in progress 1: Initiate a probe 2: Retrieve results 3: Close the ping request

Request Example:

```
{
  "host": "8.8.8.8",
  "operate": 2
}
```

Return JSON parameter description:

Parameter	Types	Required	Description
command			

data	object	Yes	
pinging	boolean	Yes	Is a ping currently in progress?
result	string	Yes	
detail	string	No	
status	number	No	0:Success 201: Ping already exists.
transmit_cast	number	No	

Return Example:

```
{
  "command" : 47,
  "data" : {
    "pinging" : false,
    "result" : "PING 8.8.8.8 (8.8.8.8): 56 data bytes\n64 bytes from 8.8.8.8: seq=0 ttl=52
time=48.260 ms\n64 bytes from 8.8.8.8: seq=1 ttl=52 time=48.548 ms\n64 bytes from 8.8.8.8:
seq=2 ttl=52 time=48.298 ms\n64 bytes from 8.8.8.8: seq=3 ttl=52 time=50.306 ms\n\n--- 8.8.8.8
ping statistics ---\n4 packets transmitted, 4 packets received, 0% packet loss\nround-trip
min/avg/max = 48.260/48.853/50.306 ms\n"
  },
  "detail" : "ok",
  "status" : 0,
  "transmit_cast" : 1
}
```