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P3/P3MINI WEB API Manual

V1.03(Version 1.22.0010)

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Example of usage:

GET

```
curl -X GET "http://127.0.0.1/api/systemctrl/users/auth_info" \
-H "authorization: eyJ0eXAiOi..." # Replace with a valid token
```

POST

```
curl -X POST "http://127.0.0.1/api/systemctrl/users/auth_info" \
-H "Content-Type: application/json" \
-H "authorization: eyJ0eXAiOi..." \
-d '{"enable": false}'
```

1. System Service / Service of systemctrl

1.1. User Management / Users

1.1.1. User Login

- **Interface Description**

Login verification, generate token

- **Request address**

/api/systemctrl/user/login

- **Request method**

POST

- **Request parameter examples**

```
{"username":"admin","password":"Admin123"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
username	String	True	username
password	String	True	password

- **Response Example**

```
{
"result": "ok",
"data": {
"token":
"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VybmFtZSI6ImFkbWluIiwibWQ1X3N0ciI6ImVhMWI3
MWI5YTljMWF
kNjAwNWI1MGQ4YmQyZjNmNjBmIiwiZXhwIjo0ODczMDE4NDY4fQ._ahoPhsUgK1jwlOOT5UPxelihRtc
0zPDtyR3nh9DQhY",
"alias": "Admin",
"changed": true
},
"msg": null
}
```

- **Response parameter description**

Parameter name	Parameter type	describe

token	String	Login-issued Token value
alias	String	User-defined aliases
changed	Boolean	Has the user changed the initial password?

1.1.2. Login Verification

- **Interface Description**

Login verification: This API makes periodic requests to check if user authentication has changed.

- **Request address**

/api/systemctrl/user/session

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.1.3. Obtaining Authentication Information

- **Interface Description**

Get user-set authentication switch information

- **Request address**

/api/systemctrl/user/auth_info

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","data":{"enable":false}}
```

- **Response parameter description**

Parameter name	Parameter type	describe
enable	Boolean	Authentication switch status

1.1.4. Setting Authentication Information

- **Interface Description**

Configure the device's authentication switch

- **Request address**

/api/systemctrl/user/auth_info

- **Request method**

POST

- **Request parameter examples**

```
{"enable":true}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Boolean	True	Authentication switch status

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

1.1.5. Retrieve all user lists

- **Interface Description**

Get all user list

- **Request address**

/api/systemctrl/user/list

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "result": "ok",
  "data": [
    {
      "id": "admin",
      "alias": "Admin",
      "web": true,
      "api": true,
      "create_time": "1970-01-01 00:00:00"
    },
    {
      "id": "zhangsan",
      "alias": "zhangsan",
      "web": true,
      "api": true,
      "create_time": "2025-06-25 14:28:03"
    }
  ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
id	String	User ID
alias	String	User alias

web	Boolean	Allow users to log in to the web (Not currently used)
API	Boolean	Allow users to send API requests (currently not used)
create_time	Timestamp	User creation time

1.1.6. Add User

- **Interface Description**

Add new user

- **Request address**

/api/systemctr/user/add

- **Request method**

POST

- **Request parameter examples**

```
{
 "id":"lisi",
 "alias":"lisi",
 "password":"Admin123",
 "confirmNewPassword":"Admin123",
 "create_time":"",
 "role":"",
 "enable_web":true,
 "enable_api":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	String	True	User ID
alias	String	True	User alias
password	String	True	User password
confirmNewPassword	String	True	Confirm Password
create_time	String	False	User creation time

role	String	False	User's role
enable_web	Boolean	True	Should users be allowed to log in to the web?
enable_api	Boolean	False	Should users be allowed to send API requests?

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.1.7. Deleting a User

- **Interface Description**

Delete created users; batch deletion is supported; admin users are not allowed to delete.

- **Request address**

/api/systemctrl/user/remove

- **Request method**

POST

- **Request parameter examples**

```
{"ids":["lisi"]}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ids	List	True	User ID List

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.1.8. Modify User Information

- **Interface Description**

Currently, modifying the information of an existing user is only allowed for modifying the alias and password of an existing user.

- **Request address**

POST

- **Request method**

/api/systemctrl/user/modify

- **Request parameter examples**

```
{
 "id":"zhangsan",
 "alias":"xiaosan",
 "create_time":"2025-06-25 14:28:03",
 "role":"",
 "enable_web":true,
 "enable_api":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	String	True	User ID
alias	String	False	User alias
create_time	String	False	Creation time
role	String	False	User's role
enable_web	Boolean	False	Should users be allowed to log in to the web?
enable_api	Boolean	False	Should users be allowed to send API requests?

- **Response Example**

{"result":"ok","msg":null}

- **Response parameter description**

none

1.2. Time and Time Zone Settings / Area and Time

1.2.1. Setting the local time zone

- **Interface Description**

Set local time zone

- **Request address**

/api/systemctrl/systime/setLocation

- **Request method**

POST

- **Request parameter examples**

{"timezone":"Asia/Shanghai","offset":8}

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
timezone	String	True	Time zone
offset	Integer	True	Greenwich Mean Time offset by hours from the currently selected time zone

- **Response Example**

{"result":"ok","msg":null}

- **Response parameter description**

none

1.2.2. Setting the System Time

- **Interface Description**

Set system time

- **Request address**

/api/systemctrl/systime/setTime

- **Request method**

POST

- **Request parameter examples**

```
{
 "time":"2025-06-26 14:31:01",
 "timetype":"pc",
 "offset":8
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
time	String	False	When timetype is manual, this field should be filled with the standard time format: YYYY-MM-DD HH:MM:SS
timetype	String	True	Time setting method
timetype is an enumeration value: pc: Time synchronization with the current PC manual: manual time setting ntp: Synchronize from an NTP server			
offset	Integer	False	Greenwich Mean Time offset by hours from the currently selected time zone
NTP	String	False	When timetype is ntp, this field should be filled with the NTP server address, with multiple addresses separated by spaces.

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.2.3. Obtain the system time zone

- **Interface Description**

Get system time zone

- **Request address**

/api/systemctrl/systime/get

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
   "result": "ok",
   "msg": null,
   "data": {
      "time": "2025-06-26 14:47:32",
      "timetype": "pc",
      "Timezone": "Asia/Shanghai",
      "offset": 8,
      "ntp": "time.windows.com time.apple.com pool.ntp.org"
   }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
time	String	When timetype is manual, this field should be filled with the standard time format: YYYY-MM-DD HH:MM:SS
timetype	String	Time setting method

Timezone	String	Time zone
offset	Integer	Greenwich Mean Time offset by hours from the currently selected time zone
NTP	String	NTP server string

1.2.4. Obtaining NTP Status

- **Interface Description**

Get NTP status

- **Request address**

GET

- **Request method**

/api/systemctrl/systime/ntpstatus

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
[
  {
   "remote": "127.127.1.0",
   "refid": ".LOCL.",
   "st": "10",
   "t": "l",
   "when": "26",
   "poll": "64",
   "reach": "1",
   "delay": "0.000",
   "offset": "0.000",
   "jitter": "0.001"
  },
  {
   "remote": "*20.189.79.72",
   "refid": "10.0.6.24",
   "st": "3",
   "t": "u",
   "when": "24",
   "poll": "64",
   "reach": "1",
   "delay": "98.516",
   "offset": "-3.859",
```

```
  "jitter": "0.001"
 },
 {
  "remote": "+17.253.84.125",
  "refid": ".GPSs.",
  "st": "1",
  "t": "u",
  "when": "26",
  "poll": "64",
  "reach": "1",
  "delay": "35.488",
  "offset": "0.051",
  "jitter": "0.001"
 },
 {
  "remote": "+162.159.200.123",
  "refid": "10.209.8.8",
  "st": "3",
  "t": "u",
  "when": "24",
  "poll": "64",
  "reach": "1",
  "delay": "200.150",
  "offset": "-29.016",
  "jitter": "0.001"
 }
]
```


- **Response parameter description**

Parameter name	Parameter type	describe
remote	String	NTP server address
refid	String	NTP server reference source
st	String	Hierarchy
t	String	Timestamp type
when	String	Time since the last synchronization
poll	String	Client polling interval
reach	String	Number of successful responses since the last communication
delay	String	Round trip delay time
offset	String	Client-server time difference

jitter	String	jitter in time synchronization

1.3. System settings

1.3.1. Obtaining the open-source license

- **Interface Description**

Obtain the device's open-source license

- **Request address**

/api/systemctrl/system/components

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": {
  "components": [
   {
    "name": "vue",
    "url": "MIT",
    "software": "MIT License",
    "address": "https://github.com/vuejs/vue"
   },
   {
    "name": "Element-UI",
    "url": "MIT",
    "software": "MIT License",
    "address": "https://github.com/ElemeFE/element"
   },
   {
    "name": "python3",
    "url": "PSF",
    "software": "PSF",
    "address": "http://www.python.org"
   },
   {
    "name": "nginx",
    "url": "BSD2C",
    "software": "BSD-2c",
    "address": "http://nginx.org"
```

```
    },
    {
     "name": "libev",
     "url": "BSD2C",
     "url2": "GPL",
     "software": "BSD-2c",
     "software2": "GPLv2+",
     "address": "http://dist.schmorp.de/libev"
    },
    {
     "name": "openssl",
     "url": "OpenSSL",
     "url2": "SSLeay",
     "software": "OpenSSL",
     "software2": "SSLeay",
     "address": "http://www.openssl.org"
    }
   ]
  }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
name	String	Component Name
URL	String	License Type
software	String	license
address	String	Official website or code repository link

1.3.2. Obtain the device name

- **Interface Description**

Get device name

- **Request address**

/api/systemctrl/system/getHostname

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result":"ok",
 "msg":null,
 "data":{
  "hostname":"P3-20240806P3001"
 }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
hostname	String	Equipment Name

1.3.3. Setting the Device Name

- **Interface Description**

Set device name

- **Request address**

/api/systemctrl/system/setHostname

- **Request method**

GET

- **Request parameter examples**

```
/api/systemctrl/system/setHostname?name=P3123
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
name	String	True	Modified device name

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.3.4. Obtaining HTTP and HTTPS port switches

- **Interface Description**

Get device HTTP and HTTPS port switches

- **Request address**

/api/systemctrl/system/getProtocol

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "msg": null,
  "data": {
    "http": true,
    "https": true,
    "httpPort": 80,
    "httpsPort": 443
  }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
http	Boolean	HTTP switch
https	Boolean	HTTPS switch
httpPort	Integer	HTTP port
httpsPort	Integer	HTTPS port

1.3.5. Configure HTTP and HTTPS port switches

- **Interface Description**

Configure HTTP and HTTPS port switches

- **Request address**

/api/systemctrl/system/setProtocol

- **Request method**

POST

- **Request parameter examples**

```
{
  "http": true,
  "https": true,
  "httpPort": 80,
  "httpsPort": 443
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe	
http	Boolean	True	HTTP switch	
https	Boolean	True	HTTPS switch	
httpPort	Integer	False	HTTP port	
httpsPort	Integer	False	HTTPS port	

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

1.3.6. Obtaining SSL Certificates and Keys

- **Interface Description**

Obtain SSL certificate and key

- **Request address**

/api/systemctrl/system/ssl

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
   "result": "ok",
   "msg": null,
   "data": {
      "ssl_crt": "",
      "ssl_key": "",
      "enable_reset": false
   }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
ssl_crt	String	SSL certificate
ssl_key	String	SSL key
enable_reset	Boolean	Allow reset?

1.3.7. Application Certificate

- **Interface Description**

Application Certificate

- **Request address**

/api/systemctrl/system/ssl

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result": "ok","msg": null}
```

- **Response parameter description**

none

1.3.8. Reset Certificate

- **Interface Description**

Reset Certificate

- **Request address**

/api/systemctrl/system/ssl

- **Request method**

DELETE

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result": "ok","msg": null}
```

- **Response parameter description**

none

1.3.9. Upload Certificate and Key

- **Interface Description**

Upload certificate and key

- **Request address**

/api/systemctrl/system/ssl/{file_type}

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

Uploading a signing certificate requires a file in .crt or .pem format.

Upload the signing key set (.key file).

- **Response Example**

```
{"result": "ok","msg": null}
```

- **Response parameter description**

none

1.3.10. Restore factory settings

- **Interface Description**

Factory reset

- **Request address**

/api/systemctrl/system/reFactory

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result": "ok","msg": null}
```

- **Response parameter description**

none

1.3.11. Reset

- **Interface Description**

Restart codec

- **Request address**

/api/systemctrl/system/restore

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result": "ok","msg": null}
```

- **Response parameter description**

none

1.3.12. Restart the device

- **Interface Description**

Device restarts after 2 seconds

- **Request address**

/api/systemctrl/system/reboot

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

{"result": "ok","msg": null}

- **Response parameter description**

none

1.3.13. ping

- **Interface Description**

Test the connectivity between the testing device and the target IP.

- **Request address**

/api/systemctrl/system/ping

- **Request method**

POST

- **Request parameter examples**

{"target_addr": "192.168.35.215"}

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
target_addr	String	True	Target IP address

- **Response Example**


```
 {
 "result": "ok",
 "data": {
  "loss_rate": 0,
  "reachable": true
 },
 "msg": null
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
loss_rate	Integer	Packet loss rate
reachable	Boolean	Is the device reachable from the target IP?

1.3.14. Obtaining Network Card Speed

- **Interface Description**

Get Ethernet card connection speed

- **Request address**

/api/systemctrl/system/getNetworkSpeed

- **Request method**

GET

- **Request parameter examples**

```
/api/systemctrl/system/getNetworkSpeed?ifname=eth0
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ifname	String	False	Network card name

- **Response Example**

```
{
 "result": "ok",
 "data": {
  "eth0": {
   "receive": 8.92,
   "transmit": 4308.7,
   "speed": 1000
  }
 }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
receive	Float	Number of bytes accepted
transmit	Float	Number of bytes sent
speed	Integer	speed

1.3.15. Obtaining System Information

- **Interface Description**

Get system information

- **Request address**

/api/systemctrl/system/getSystemInfo

- **Request method**

GET

- **Request parameter examples**

```
/api/systemctrl/system/getSystemInfo?version=true&cpu=true&memory=true&disk=true&persisTime=true&imei=true
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
version	Boolean	False	Do you want to query version information?
CPU	Boolean	False	Query CPU information?
memory	Boolean	False	Query memory information?
disk	Boolean	False	Do you want to query disk information?
persisTime	Boolean	False	Do you want to check device uptime?
imei	Boolean	False	Do you want to query the module IMEI?

- **Response Example**

```
{
 "result": "ok",
 "data": {
  "version": {
   "ndiVersion": "5.1.3",
   "hardwareVersion": "2.0",
   "softwareVersion": "1.21.0009.0002",
   "serialNumber": "20240806P3001",
   "product": "P3",
```

```
    "oem": "kiloview"
   },
   "cpu": {
    "precent": 57.944
   },
   "mem": {
    "precent": 33.6,
    "total": 1029500,
    "used": 345972
   },
   "disk": {
    "precent": 31,
    "free": 1288652,
    "used": 588780,
    "total": 1998672
   },
   "persisTime": {
    "uptime": 56019.12
   },
   "imei": {
    "IMEI1": "",
    "IMEI2": "",
    "IMEI3": "",
    "IMEI4": ""
   }
  }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
version	Object	Device version information
ndiVersion	String	NDI version
hardwareVersion	String	Hardware version
softwareVersion	String	Software version
serialNumber	String	Serial Number
product	String	Equipment Name
OEM	String	Manufacturer
CPU	Object	Device CPU Information
percent	Float	CPU utilization
mem	Object	Device memory information

percent	Float	Memory usage
total	Integer	Total memory
used	Integer	Used memory
disk	Object	Disk information
percent	Float	Disk usage
free	Integer	Remaining disk space
used	Integer	Disk space used
total	Integer	Total disk space
persisTime	Object	System operation information
uptime	Float	System uptime
imei	Object	Device module IMEI information
IMEI1	String	SIM Card Slot 1 Module IMEI
IMEI2	String	SIM Card Slot 2 Module IMEI
IMEI3	String	SIM Card Slot 3 Module IMEI
IMEI4	String	SIM Card Slot 4 Module IMEI

1.3.16. Upload upgrade firmware

- **Interface Description**

Upload upgrade firmware

- **Request address**

/api/systemctrl/system/upload

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

Upload upgrade package firmware

- **Response Example**

```
{"result": "ok"}
```

- **Response parameter description**

none

1.3.17. Upload firmware upgrade in chunks

- **Interface Description**

Upload firmware upgrade in chunks

- **Request address**

/api/systemctrl/system/uploadfile

- **Request method**

POST

- **Request parameter examples**

Form data

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
identifier	String	True	Firmware package unique identifier
file	file	True	Firmware package fragmentation
number	Integer	True	Segment Number
file_type	String	True	Firmware package type

- **Response Example**

```
{"result":"ok","number":"27"}
```

- **Response parameter description**

Parameter name	Parameter type	describe
number	Integer	Current number of uploaded fragments

1.3.18. Firmware Merging

- **Interface Description**

Firmware merging

- **Request address**

/api/systemctrl/system/mergefile

- **Request method**

POST

- **Request parameter examples**

```
{
 "identifier":"firmware-P3-kiloview-1.21.0009.0002-20250626",
 "number":235,
 "file_type":"bin
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
identifier	String	True	Firmware package unique identifier
number	Integer	True	Firmware package fragment count
file_type	String	True	Firmware package type

- **Response Example**

```
{"result": "ok"}
```

- **Response parameter description**

none

1.3.19. Product Testing Service Switch

- **Interface Description**

The product testing service switch is provided to the webui-production page, enabling the py-production-module.

- **Request address**

/api/systemctrl/system/production_off

- **Request method**

POST

- **Request parameter examples**

```
{
  "value": true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
value	Boolean	True	Test switch

- **Response Example**

```
{"result": "ok"}
```

- **Response parameter description**

none

1.3.20. Test the start/stop status of the service

- **Interface Description**

Product testing service on/off status

- **Request address**

/api/ststemctrl/system/production_stat

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "data": {
    "value": true
  }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
value	Boolean	Switch status

1.4. Log Service / System log

1.4.1. Obtaining Logs

- **Interface Description**

Get logs

- **Request address**

/api/systemctrl/system_log/get/{logname}

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
logname	String	True	Service Name
logname: Which service's log should be requested? codec: Encoding service			

streamer: streaming service record: Recording service network: network services system: system services Kilolink: Aggregator Service

- **Response Example**

```
{
 "result": "ok",
 "data": "..."
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
data	String	Detailed log content

1.4.2. Exporting System Logs

- **Interface Description**

Export system logs

- **Request address**

/api/systemctrl/system_log/export/{time}

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
time	String	True	Time required to export logs
time: The log from which time period should be exported.			

new: The most recent day old: All logs

- **Response Example**

none

- **Response parameter description**

Log compressed package

2. Recording Service

2.1. Recording Configuration / Record

2.1.1. Delete recording files

- **Interface Description**

Delete recording files

- **Request address**

/api/record/record/remove_file

- **Request method**

POST

- **Request parameter examples**

```
{"path":"/run/media/sdb1/RECORD/MAIN20250521_162924_517475/REC-MAIN-20250521162924517475l.mp4"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
path	String	True	Path to the recording file to be deleted

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

2.1.2. Obtain the list of recorded files

- **Interface Description**

Get the list of recorded files

- **Request address**

/api/record/record/get_disk_files

- **Request method**

GET

- **Request parameter examples**

```
/api/record/record/get_disk_files?device=/run/media/sdb1
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
device	String	True	Disk mount point

- **Response Example**

```
{
 "result":"ok",
 "data": [
   {
    "path": "/run/media/sdb1/RECORD/MAIN20250521_161544_719240/REC-MAIN-
20250521161544719240 1.mp4",
          "name": "REC-MAIN-20250521161544719240 1.mp4",
          "size": 6.75,
          "current": false,
          "stream": "main",
          "start_time": "2025-05-21 16:15:44",
          "end_time": "2025-05-21 16:16:01"
  }
 ]
 }
```

- **Response parameter description**

Parameter name	Parameter type	describe
path	String	Full path to the recording file
name	String	Recording file name

size	Float	Recording file size
current	Boolean	Is the current file still being written to?
stream	String	Recording source
start_time	String	Recording start time
end_time	String	Recording end time

2.1.3. Select USB cloud drive

- **Interface Description**

Select USB cloud drive

- **Request address**

/api/record/record/choose_usb

- **Request method**

POST

- **Request parameter examples**

```
{"id":"sdb1","choose":false}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	String	True	Disk partition name
choose	Boolean	True	Selected?

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

2.1.4. Storage List

- **Interface Description**

Storage list

- **Request address**

/api/record/record/disk_list

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "result": "ok",
  "data": {
    "nas": [],
    "USB": [
      {
        "id": "sdb1",
        "name": "sdb1",
        "type": "",
        "host": "",
        "volume": "/dev/sdb1",
        "options": "",
        "mounted": "/run/media/sdb1",
        "filesys": "vfat",
        "status": "mounted",
        "choose": true,
        "disk_type": "usb",
        "total": 953867,
        "used": 437021,
        "free": 516845,
        "percent": 45
      }
    ]
  }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
nas	Object	NAS disk information (Adding a NAS disk is not supported on this device at present)

USB	Object	USB drive information
id	String	Disk ID
name	String	Disk partition name
type	String	Disk partition type
host	String	Hostname
volume	String	Mounting point
options	String	Mount options
mounted	String	Mounting location
filesys	String	File system
status	String	Mounted status
choose	Boolean	Selected?
disk_type	String	Disk type
total	Integer	Total disk space
used	Integer	Used space
free	Integer	Available space
percent	Integer	Usage percentage

2.1.5. Recording Information

- **Interface Description**

Get recording information

- **Request address**

/api/record/record/get_record_info

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": {
  "disk_type": "largest",
  "format": "ts",
  "file_prefix": "REC",
  "limit_type": "time-loop",
  "limit_size": 51200,
  "limit_time": 60,
  "disk_policy": "noSpace",
  "follow_timecode_start": false
 }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
disk_type	String	Disk type
format	String	Recording format
file_prefix	String	Recording file prefix
limit_type	String	File restrictions
limit_size	Integer	Recording file size limit
limit_time	Integer	Recording time limit
disk_policy	String	Storage Space Policy
follow_timecode_start	Boolean	Does it start/stop according to timecode?

2.1.6. Video Recording Configuration

- **Interface Description**

Video recording configuration

- **Request address**

/api/record/record/settings

- **Request method**

POST

- **Request parameter examples**

```
{
 "format":"mp4",
 "file_prefix":"REC",
 "limit_type":"time-loop",
 "limit_size":51200,
 "limit_time":60,
 "disk_policy":"noSpace",
 "follow_timecode_start":false
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
format	String	True	Recording file format
format: Recording file format MP4: mp4 MOV:mov TS: ts			
file_prefix	String	True	Recording file prefix
limit_type	String	True	File restrictions
limit_type: File restrictions No size or duration limit: none Limit file size and automatically split into multiple files: size_loop Limit duration and automatically split into multiple files: time_loop			
limit_size	Integer	True	Limit the size of the recorded file
limit_time	Integer	True	Limit the recording duration

follow_timecode_start	Boolean	False	Whether to record with timecode
disk_policy	String	True	Storage Space Policy
disk_policy: Storage space policy Stop recording when space is insufficient: noSpace Overwrite old video files: overwrite			

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

2.2. Recording Button

2.2.1. Video Recording

- **Interface Description**

Video recording switch

- **Request address**

/api/record/v1/get_recording_status

- **Request method**

GET

- **Request parameter examples**

```
{"start":true}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
start	Boolean	True	Recording switch

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

2.2.2. Obtain Recording Status

- **Interface Description**

Get recording status

- **Request address**

/api/record/v1/get_recording_status

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","data":{"status":false}}
```

- **Response parameter description**

Parameter name	Parameter type	describe
status	Boolean	Recording status

3. Service of stream

3.1. Streaming Service

3.1.1. Obtaining the Stream List

- **Interface Description**

Get the list of streams

- **Request address**

/api/streamer/v1/stream/list

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
[
  {
    "id": "11213c00ab3bf668",
    "type": "srt",
    "name": "SRT1",
    "enable": false,
    "status": "stop",
    "bindAudio": 3,
    "address": "",
    "connectionMode": "Listener",
    "encryption": "0",
    "passphrase": "",
    "latency": 125,
    "bandwidth": 25,
    "payloadSize": 1316,
    "listenerPort": 1025,
    "srt_stream_id": "",
    "ts_null_multiple": 0,
    "ts_pcr_period": 20,
    "ts_pts_pcr_delay": 200,
    "ts_transport_stream_id": 101,
    "auto_enable": false,
    "bindNetwork": "auto",
    "shortcut_stream": false,
    "bool": false,
    "network_enable": true,
    "addressUrl": "offline"
  }
]
```


- **Response parameter description**

Since the parameters are different for each stream type, the return value is described in the parameter description for adding the stream.

3.1.2. Adding a Stream

- **Interface Description**

Add Stream

- **Request address**

/api/streamer/v1/stream

- **Request method**

POST

- **Request parameter examples**

```
{
 "group":"",
 "channel_name":"",
 "connection":"disable_rudp",
 "netprefix":"",
 "netmask":"",
 "ttl":1,
 "discovery_server":"",
 "bindNetwork":"auto",
 "name":"NDI",
 "type":"ndi_hx",
 "bindAudio":1
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
NDI|HX Stream			
group	String	True	Group Name
channel_name	String	True	Channel Name
connection	String	True	Connection method
connection: connection method Default: disable_rudp RUDP: rudp Disable Multi-TCP:udp Multicast			
netprefix	String	True	multicast address
netmask	String	True	Subnet mask
ttl	Integer	True	TTL

discovery_server	String	True	Discover server address
bindNetwork	String	True	Network Link
bindNetwork: Network link AUTO: auto LAN: eth0 WLAN: wlan0 SIM1: modem1 SIM2: modem2 SIM3: modem3 SIM4: modem4			
name	String	True	Stream Name
type	String	True	Stream type
type: Stream type NDI|HX：ndi RTSP: rtsp RTMP/RTMPS: rtmp SRT: srt HLS:hls TS-UDP: UDP RTP: rtp			
bindAudio	Integer	True	Bind audio ID
RTSP stream			
auth	Boolean	True	Enable RTSP authentication?
bindAudio	Integer	True	Bind audio ID

bindNetwork	String	True	Network Link
httpTunnelPort	Integer	True	HTTP tunnel port
multicast_addr	String	True	multicast address
multicast_enable	Boolean	True	Enable multicast?
multicast_port_max	Integer	True	Maximum multicast port
multicast_port_min	Integer	True	Minimum multicast port
multicast_ttl	Integer	True	Multicast TTL
name	String	True	Stream Name
portRTMO	Integer	True	Service Port
session	String	True	Session ID
type	String	True	Stream type
RTMP/RTMPS stream			
address	String	True	Push Stream Address
bindAudio	Integer	True	Bind audio ID
bindNetwork	String	True	Network Link
connIntv	Integer	True	Reconnection interval
connTimeout	Integer	True	Connection timeout
name	String	True	Stream Name
type	String	True	Stream type
user	String	True	username
password	String	True	password
SRT Flow			

address	String	True	Push Stream Address
bindWidth	Integer	True	Bit width
bindAudio	Integer	True	Bind audio ID
bindNetwork	String	True	Network Link
connectionMode	String	True	Handshake mode
connectionMode: Handshake Mode Listener: Listener Caller: Caller Rendezvous：Rendezvous			
encryption	String	True	Encryption method
encryption: encryption method none: 0 AES-128: AES-128 AES-192: AES-192 AES-256			
latency	Integer	True	Delay
listenerPort	Integer	True	Listening port
name	String	True	Stream Name
passphrase	String	True	ASE key
payloadSize	Integer	True	Packet payload
srt_stream_id	Integer	True	Stream ID
ts_null_multiple	Integer	True	Empty packet sending interval
ts_pcr_period	Integer	True	pcr emission period

ts_pts_pcr_delay	Integer	True	PTS and PCR interval
ts_transport_stream_id	Integer	True	ts Transport Stream ID
type	String	True	Stream type
HLS stream			
BindAudio	Insteger	True	Bind audio ID
BindNetwork	String	True	Network Link
maxSegments	Integer	True	Number of slices
media_playlist_url	String	True	Media playback URL
mode	String	True	Connection mode
mode: Connection mode SERVER: server PUSH: push			
name	String	True	Stream Name
segmentTime	Integer	True	Slice length
session	String	True	Session ID
type	String	True	Stream type
ts-udp stream			
address	String	True	Push Stream Address
advanced	String	True	Enable advanced settings?
bindAudio	Integer	True	Bind audio ID
bindNetwork	String	True	Network Link
name	String	True	Stream Name

port	Integer	True	port
ts_null_multiple	Integer	True	Empty packet sending interval
ts_pcr_period	Integer	True	PCR signal emission cycle
ts_pmt_start_pid	Integer	True	PMT starts with PID
ts_pts_pcr_delay	Integer	True	PTS and PCR interval
ts_service_name	String	True	Service Name
ts_service_provider	String	True	Service Provider Name
ts_start_pid	Integer	True	Data stream starts with PID
ts_tables_version	Integer	True	Program schedule version
ts_transport_stream_id	Integer	True	Transport Stream ID
ttl	Integer	True	TTL
type	String	True	Stream type
RTP stream			
address	String	True	Push Stream Address
bindAudio	Integer	True	Bind audio ID
bindNetwork	String	True	Network Link
load_type	String	True	Load type
name	String	True	Stream type
port	Integer	True	port
ts_service_name	String	True	Service Name
ts_service_provider	String	True	Service Provider Name

type	String	True	Stream type
WHIP stream			
auth_token	String	True	Whip's push address token
bindAudio	Integer	True	Bound audio ID
bindNetwork	Integer	True	Bound network ID
name	String	True	Stream Name
server_address	String	True	Push Stream Address
stun_server	String	True	Domain Name Resolution Server
timeout	Integer	True	Timeout
turnList	List	True	Traffic relay server
username	String	True	username
password	String	True	password
server	String	True	Server address
type	String	True	Stream type

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.3. Modifying the Flow

- **Interface Description**

Modify Stream

- **Request address**

/api/streamer/v1/stream/{stream_id}

- **Request method**

PUT

- **Request parameter examples**

```
{
 "address":"192.168.35.215",
 "port":1026,
 "load_type":"ts",
 "ts_service_name":"Encoder",
 "ts_service_provider":"Encoder device",
 "id":"542b4dcb8d15d59b",
 "bindNetwork":"auto",
 "name":"RTP",
 "type":"rtp",
 "bindAudio":1
}
```

- **Request Parameter Description**

Referring to the parameters for the Add Stream interface, an additional parameter, Stream ID, is required. See the request parameter example above for details.

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.4. Deletion Stream

- **Interface Description**

Deletion stream

- **Request address**

/api/streamer/v1/stream/{stream_id}

- **Request method**

DEELTE

- **Request parameter examples**

```
/api/streamer/v1/stream/542b4dcb8d15d59b
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
stream_id	String	True	Stream ID

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.5. Flow switch

- **Interface Description**

flow switch

- **Request address**

/api/streamer/v1/stream/enable

- **Request method**

POST

- **Request parameter examples**

```
{
  "id":"17ac289ffbd0062b",
  "enable":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	String	True	Stream ID
enable	Boolean	True	Enable streaming?

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.6. Reset NDI

- **Interface Description**

Reset NDI

- **Request address**

/api/streamer/v1/stream/ndi/reset

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.7. Obtaining Webrtc

- **Interface Description**

Get WebRTC

- **Request address**

/api/streamer/v1/stream/get_webrtc?mode=0

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

mode: mode

0: Video

1: Image

- **Response Example**


```
{
   "result": "ok",
   "port": 53529,
   "sdp": "v=0\r\no=- 1495799811084970 1495799811084970 IN IP4 192.168.35.178\r\ns=-\r\nt=0
0\r\na=group:BUNDLE video\r\na=msid-semantic: WMS \r\na=ice-lite\r\nm=video 1 RTP/SAVPF 126\r\nc=IN
IP4 0.0.0.0\r\na=mid:video\r\na=sendonly\r\na=rtcp-mux\r\na=ice-ufrag:qwrw\r\na=ice-
pwd:h6p9dg69o2rhzlwxyza261r6\r\na=ice-options:trickle\r\na=fingerprint:sha-256
63:A1:55:2F:D7:37:FE:21:1F:E0:77:59:A0:68:87:20:AA:F1:CE:F8:CF:CA:11:CB:D7:E6:3E:3F:36:2C:66:F7\r\
na=setup:actpass\r\na=rtpmap:126 H264/90000\r\na=fmtp:126 level-asymmetry-allowed=1;packetization-
mode=1;profile-level-id=42e01f\r\na=candidate:1 1 udp 12345678 192.168.35.178 53529 typ host\r\n",
   "id": "25a61cd4248f6b46
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
port	Integer	port
sdp	String	
id	String	Stream ID

3.1.8. Setting up Webrtc

- **Interface Description**

Configure Webrtc

- **Request address**

/api/streamer/v1/stream/set_webrtc?mode=1&stream_id=25a61cd4248f6b46

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

mode: mode

0: Video

1: Image

stream_id: stream ID

- **Response Example**

```
{result: "ok"}
```

- **Response parameter description**

none

3.1.9. Acquiring Media Users

- **Interface Description**

Acquiring media users

- **Request address**

/api/streamer/v1/stream/media_user

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","user_list":["admin"]}
```

- **Response parameter description**

Parameter name	Parameter type	describe
user_list	List	Media User List

3.1.10. Add Media Users

- **Interface Description**

Add media users

- **Request address**

/api/streamer/v1/stream/media_user

- **Request method**

POST

- **Request parameter examples**

```
{
  "oper":"add",
  "username":"zhangyu",
  "password":"Admin123"
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
oper	String	True	Operation type
username	String	True	username
password	String	True	password

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.1.11. Delete Media Users

- **Interface Description**

Delete media users

- **Request address**

/api/streamer/v1/stream/media_user/{user_name}

- **Request method**

DELETE

- **Request parameter examples**

```
/api/streamer/v1/stream/media_user/zhangyu
```

- **Request Parameter Description**

user_name: Username

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.2. PTZ settings

3.2.1. PTZ Control

- **Interface Description**

PTZ control

- **Request address**

/api/streamer/ptz/control?action=right&speed=50

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
action	String	True	PTZ Actions
speed	Integer	True	PTZ movement speed
action: PTZ action up: upward down: downward left: to the left right: to the right left-up: top left			

left-down: bottom left

right-up: top right

right-down: bottom right

speed: PTZ movement speed

1-100

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

3.2.2. Obtaining PTZ Information

- **Interface Description**

Obtain PTZ information

- **Request address**

/api/streamer/ptz/info

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "data": {
    "enable": 1,
    "typ": "network",
    "network": {
      "protocol": "TCP",
      "addr": "192.168.43.225",
      "port": 52381,
      "ptz_protocol": "Sony Visca",
      "ptz_addr": "1"
```

```
    },
    "serial": {
      "device": "none",
      "baudrate": 9600,
      "parity": "none",
      "startBits": 8,
      "endBits": 1,
      "xonxoff": 0,
      "rtscts": 0,
      "ptz_protocol": "Sony Visca",
      "ptz_addr": "1"
    },
    "USB": {
      "ptz_protocol": "v4l2-ctl",
      "ptz_addr": "1",
      "port": 1,
      "control_type": "virtual",
      "device": "/dev/video0"
    }
  }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
enable	Integer	PTZ control switch
typ	String	PTZ type
network	Object	Network PTZ Configuration
protocol	String	Network Protocol
addr	String	Target IP address
port	Integer	port
ptz_protocol	String	PTZ Protocol
ptz_addr	String	PTZ address
serial	Object	Serial port PTZ configuration
device	String	Serial port devices
baudrate	Integer	baud rate
parity	String	check

startBits	Integer	Data bits
endBits	Integer	Stop bit
xonxoff	Integer	xonxoff
rtscts	Integer	rtscts
ptz_protocol	String	PTZ Protocol
ptz_addr	String	PTZ address
USB	Object	USB Configuration
ptz_protocol	String	PTZ Protocol
ptz_addr	String	PTZ address
port	Integer	port
control_type	String	Control type
device	String	USB devices

3.2.3. Obtaining the PTZ Protocol

- **Interface Description**

Obtain the PTZ protocol

- **Request address**

/api/streamer/ptz/protocol

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result":"ok",
 "msg":null,
 "data":["Sony Visca","Pelco-d","Pelco-p"]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
data	List	PTZ Protocol List

3.2.4. Obtaining the serial port device

- **Interface Description**

Get serial port device

- **Request address**

/api/streamer/ptz/serial_device

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

{"result":"ok","data":[]}

- **Response parameter description**

Parameter name	Parameter type	describe
data	List	Serial port device list

3.2.5. Modify PTZ information

- **Interface Description**

Modify PTZ information

- **Request address**

/api/streamer/ptz/modify

- **Request method**

POST

- **Request parameter examples**

```
{
 "enable":1,
 "typ":"serial",
 "ptz_addr":1,
 "ptz_protocol":"Sony Visca",
 "rtscts":0,
 "startBits":8,
 "endBits":1,
 "xonxoff":0,
 "device":"none",
 "parity":"none",
 "baudrate":9600
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Integer	True	PTZ control switch
typ	String	True	PTZ type
typ: PTZ type Network PTZ Serial port: serial USB: usb			
ptz_addr	Integer	True	PTZ address
ptz_protocol	String	True	PTZ Protocol
Serial port parameters			
rtscts	Integer	True	RTS/CTS
startBits	Integer	True	Data bits
endBits	Integer	True	Stop bit

xonxoff	Integer	True	XON/XOFF
device	String	True	Serial port devices
parity	String	True	check
baudrate	Integer	True	baud rate
Network parameters			
addr	String	True	Target IP address
port	Integer	True	port
protocol	String	True	Network Protocol
protocol: network protocol TCP: TCP UDP: UDP			
USB parameters			
control_type	String	True	USB type
control_type: USB type Web control: virtual External control: USB			

- **Response Example**

```
{"result":"ok","msg":null}
```

- **Response parameter description**

none

4. Network service

4.1. Network Management

4.1.1. Obtain eth0 network information (for PC)

- **Interface Description**

Get eth0 network information

- **Request address**

/api/networkmanager/network/GetLinkinfo

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "result": "ok",
   "data": [
      {
         "status": "up",
         "address": "192.168.35.178",
         "netmask": "255.255.255.0",
         "gw": "192.168.35.254",
         "mac": "4A:53:F6:E8:CF:12",
         "method": "static",
         "enable": true,
         DNS: "8.8.8.8;8.8.4.4",
         "device": "eth0"
      }
   ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
data	List	eth0 information
status	String	Network card status

address	String	IP address
netmask	String	Subnet mask
gw	String	gateway
Mac	String	MAC
method	String	IP Acquisition Method
enable	Boolean	Is the network card usable?
DNS	String	DNS
device	String	Network card name

4.1.2. Obtain the list of network links

- **Interface Description**

Get network link list

- **Request address**

/api/networkmanager/network/GetLinkList

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
   {
    "device": "eth0",
    "device_name": "ETH0",
    "status": "up",
    "address": "192.168.35.178",
    "netmask": "255.255.255.0",
    "mac": "4A:53:F6:E8:CF:12",
    "gw": "192.168.35.254"
```

```
  }
 ]
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
data	List	Network Link List
device	String	Network card
device_name	String	Network card name
status	String	Network card status
address	String	IP address
netmask	String	Subnet mask
Mac	String	MAC
gw	String	gateway

4.1.3. Modify current device network information (all)

- **Interface Description**

Modify current device network information

- **Request address**

/api/networkmanager/network/ChangeLinkinfo

- **Request method**

POST

- **Request parameter examples**

```
{
 "ifname": "eth0",
 "cfg": {
  "enable": true,
  "method": "dhcp",
  "address": "214.241.240.237",
  "netmask": "240.255.164.224",
  "gw": "",
  "mac": "string",
  "dns": "string"
```

```
  }
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ifname	String	True	Network port name
cfg	Object	True	Configuration
enable	Boolean	True	Enable or disable?
method	String	True	IP Acquisition Method
address	String	True	IP address
netmask	String	True	Subnet mask
gw	String	True	gateway
Mac	String	True	MAC
DNS	String	True	DNS

- **Response Example**

```
{"result":"ok","data":[]}
```

- **Response parameter description**

none

4.1.4. Ethernet Switch

- **Interface Description**

Ethernet switch

- **Request address**

/api/networkmanager/network/SetSwitch

- **Request method**

POST

- **Request parameter examples**

```
{
 "ifname": "eth0",
 "enable": true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ifname	String	True	Network port name
enable	Boolean	True	Enable or disable?

- **Response Example**

```
{"result":"ok","data":[]}
```

- **Response parameter description**

none

4.1.5. Obtaining Network Card Information (for small screens)

- **Interface Description**

Get network card information

- **Request address**

/api/networkmanager/network/GetEthernets

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result": "ok",
 "data": {
  "status": "up",
  "address": "192.168.35.178",
  "netmask": "255.255.255.0",
```

```
   "gw": "192.168.35.254",
   "mac": "4A:53:F6:E8:CF:12",
   "method": "static",
   "enable": true,
   DNS: "8.8.8.8;8.8.4.4",
   "device": "eth0"
  }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
status	String	Network card status
address	String	IP address
netmask	String	Subnet mask
gw	String	gateway
Mac	String	MAC
method	String	IP Acquisition Method
enable	Boolean	Enable or disable?
DNS	String	DNS
device	String	network port

4.1.6. Configure network card information

- **Interface Description**

Configure network card information

- **Request address**

/api/networkmanager/network/SetEthernets

- **Request method**

POST

- **Request parameter examples**

```
{
 "ifname":"eth0",
 "method":"static",
```

```
 "address":"192.168.35.178",
 "netmask":"255.255.255.0",
 "gw":"192.168.35.254",
 "dns":"8.8.8.8;8.8.4.4",
 "mac":"4A:53:F6:E8:CF:12"
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ifname	String	True	Network card name
method	String	True	IP Acquisition Method
address	String	True	IP address
netmask	String	True	Subnet mask
gw	String	True	gateway
DNS	String	True	DNS
Mac	String	True	MAC

- **Response Example**

```
{"result":"ok","data":[]}
```

- **Response parameter description**

none

4.1.7. Reset MDNS

- **Interface Description**

Reset MDNS

- **Request address**

/api/networkmanager/network/ResetMDNS

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","data":[]}
```

- **Response parameter description**

none

4.1.8. Obtain the network speed of all network interfaces.

- **Interface Description**

Get network speed of all network interfaces

- **Request address**

/api/networkmanager/network/getNetworkSpeed

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
   {
    "enable": true,
    "modems": "total",
    "name": "total",
    "type": "total",
    "receive": 437.02,
    "transmit": 24.86,
    "sort": 1
   },
   {
    "modems": "eth0",
    "address": "192.168.35.178",
    "name": "eth0",
    "type": "eth",
```

```
    "enable": true,
    "enable_card": true,
    "version": "",
    "signal_version": "",
    "modem_Operator": "eth0",
    "signal": 0,
    "rsrp": 0,
    "sinr": 0,
    "receive": 30.95,
    "transmit": 24.86,
    "sort": 2,
    "insert_card": "no",
    "connect_number": 0,
    "wwan_name": "eth0",
    "pin_status": 10
  },
  {
    "modems": "wlan0",
    "address": "192.168.230.113",
    "name": "KILOVIEW_5G",
    "type": "wlan",
    "enable": true,
    "enable_card": true,
    "version": "",
    "signal_version": "",
    "modem_Operator": "wlan0",
    "signal": -100,
    "rsrp": 0,
    "sinr": 0,
    "receive": 406.07,
    "transmit": 0,
    "sort": 3,
    "insert_card": "no",
    "connect_number": 0,
    "wwan_name": "wlan0",
    "pin_status": 10
  },
  {
    "modems": "wlan1",
    "address": "192.168.140.254",
    "name": "P3_ed95fd",
    "type": "wlan",
    "enable": true,
    "enable_card": true,
    "version": "",
    "signal_version": "",
    "modem_Operator": "wlan1",
    "signal": 0,
    "rsrp": 0,
    "sinr": 0,
    "receive": 0,
    "transmit": 0,
    "sort": 4,
    "insert_card": "no",
    "connect_number": 0,
    "wwan_name": "wlan1",
    "pin_status": 10
  }
]
```

```
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
modems	String	Module Name
address	String	IP address
name	String	Network Name
type	String	type
enable	Boolean	Is it available?
enable_card	Boolean	Is a card inserted?
version	String	Module version
signal_version	String	signal type
modem_Operator	String	Module operator
signal	Integer	signal value
rsrp	Integer	RSRP
sinr	Integer	SINR
receive	Float	Number of bytes received
transmit	Float	Number of bytes sent
sort	Integer	Sort
insert_card	String	Is a card inserted?
connect_number	Integer	AP connection count
wwan_name	String	Network port name
pin_status	Integer	SIM card PIN status

4.1.9. Obtain all data from each network interface.

- **Interface Description**

Obtain all data from each network interface

- **Request address**

/api/networkmanager/network/getNetworkInterfaceAllData

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
  {
   "enable": true,
   "modems": "total",
   "name": "total",
   "type": "total",
   "receive": 445.59,
   "transmit": 24.81,
   "sort": 1
  },
  {
   "modems": "eth0",
   "address": "192.168.35.178",
   "name": "eth0",
   "type": "eth",
   "enable": true,
   "enable_card": true,
   "version": "",
   "signal_version": "",
   "modem_Operator": "eth0",
   "signal": 0,
   "rsrp": 0,
   "sinr": 0,
   "receive": 38.97,
   "transmit": 24.66,
   "sort": 2,
   "insert_card": "no",
   "connect_number": 0,
   "wwan_name": "eth0",
   "pin_status": 10
  },
```

```
    {
     "modems": "wlan0",
     "address": "192.168.230.113",
     "name": "KILOVIEW_5G",
     "type": "wlan",
     "enable": true,
     "enable_card": true,
     "version": "",
     "signal_version": "",
     "modem_Operator": "wlan0",
     "signal": -100,
     "rsrp": 0,
     "sinr": 0,
     "receive": 406.62,
     "transmit": 0.15,
     "sort": 3,
     "insert_card": "no",
     "connect_number": 0,
     "wwan_name": "wlan0",
     "pin_status": 10
    },
    {
     "modems": "wlan1",
     "address": "192.168.140.254",
     "name": "P3_ed95fd",
     "type": "wlan",
     "enable": true,
     "enable_card": true,
     "version": "",
     "signal_version": "",
     "modem_Operator": "wlan1",
     "signal": 0,
     "rsrp": 0,
     "sinr": 0,
     "receive": 0,
     "transmit": 0,
     "sort": 4,
     "insert_card": "no",
     "connect_number": 0,
     "wwan_name": "wlan1",
     "pin_status": 10
    }
   ]
}
```


- **Response parameter description**

See section 4.1.8 for parameter descriptions.

4.1.10. Obtain the mapping relationship of each network interface.

- **Interface Description**

Obtain the mapping relationship of each network interface

- **Request address**

/api/networkmanager

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
  {
   "name": "eth0",
   "wwan_name": "eth0",
   "version": "",
   "alias": "eth0",
   "sub_wwan": "eth0",
   "address": "192.168.35.178"
  },
  {
   "name": "wlan0",
   "wwan_name": "wlan0",
   "version": "",
   "alias": "KILOVIEW_5G",
   "sub_wwan": "wlan0",
   "address": "192.168.230.113"
  }
 ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
name	String	Network port name
wwan_name	String	Network port name
version	String	Network card version
alias	String	Network port alias
sub_wwan	String	Sub-NIC name

address	String	IP address

4.1.11. Obtain network interface card (NIC) traffic statistics.

- **Interface Description**

Get network card traffic statistics information

- **Request address**

/api/networkmanager/network/traffic_data

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
  {
   "receive": 371494655,
   "transmit": 1403095098,
   "start_time": "2025/06/04 14:17:44",
   "type": "eth",
   "name": "eth0",
   "sort": 2,
   "traffic_key": "eth0"
  },
  {
   "receive": 219761167,
   "transmit": 193659699,
   "start_time": "2025/06/04 14:17:44",
   "type": "wlan",
   "name": "KILOVIEW_5G",
   "sort": 3,
   "traffic_key": "wlan0
  }
 ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe

receive	Float	Number of bytes received
transmit	Float	Number of bytes sent
start_time	String	Start of statistics time
type	String	Network port type
name	String	Network port name
sort	Integer	Sort field
traffic_key	String	Statistical information key value

4.1.12. Clear network card traffic statistics.

- **Interface Description**

Clear network card traffic statistics

- **Request address**

/api/networkmanager/network/traffic_data

- **Request method**

POST

- **Request parameter examples**

```
{"traffic_keys":["eth0","wlan0"]}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
traffic_keys	List	True	Traffic statistics key-value list

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

4.1.13. Retrieve the list of current network connections

- **Interface Description**

Get the list of current network connections

- **Request address**

/api/networkmanager/network/current_networks

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
   {
    "name": "eth0",
    "wwan_name": "eth0",
    "version": "",
    "alias": "eth0",
    "sub_wwan": "eth0",
    "address": "192.168.35.178",
    "weight": 252
   },
   {
    "name": "wlan0",
    "wwan_name": "wlan0",
    "version": "",
    "alias": "KILOVIEW_5G",
    "sub_wwan": "wlan0",
    "address": "192.168.230.113",
    "weight": 251
   }
 ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
name	String	Network card name

wwan_name	String	Network card name
version	String	Version Name
alias	String	Network card alias
sub_wwan	String	Sub-NIC name
address	String	IP address
weight	Integer	Weight

4.1.14. Binding the network card

- **Interface Description**

Bind network card

- **Request address**

/api/networkmanager/network/bind_network

- **Request method**

POST

- **Request parameter examples**

```
{
 "pid": 0,
 "network_name": "string"
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
pid	Integer	True	The process ID of the network card needs to be bound.
network_name	String	True	Network card name

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

4.1.15. Obtain the list of network interface cards (NICs)

- **Interface Description**

Get network card list

- **Request address**

/api/networkmanager/network/list_network

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
   {
    "name": "AUTO",
    value: "auto"
   },
   {
    "name": "LAN",
    "value": "eth0",
    "type": "eth",
    "address": "192.168.35.178",
    "modem_Operator": "eth0",
    "enable": true
   },
   {
    "name": "WLAN",
    "value": "wlan0",
    "type": "wlan",
    "address": "192.168.230.113",
    "modem_Operator": "KILOVIEW_5G",
    "enable": true
   },
   {
    "name": "SIM1",
    "value": "modem1",
    "type": "",
    "address": "",
    "modem_Operator": "",
```

```
    "enable": false
   },
   {
    "name": "SIM2",
    "value": "modem2",
    "type": "",
    "address": "",
    "modem_Operator": "",
    "enable": false
   },
   {
    "name": "SIM3",
    "value": "modem3",
    "type": "",
    "address": "",
    "modem_Operator": "",
    "enable": false
   },
   {
    "name": "SIM4",
    "value": "modem4",
    "type": "",
    "address": "",
    "modem_Operator": "",
    "enable": false
   }
  ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
name	String	Module Name
value	String	Module value
type	String	Network card type
address	String	IP address
modem_Operator	String	Operator Name
enable	Boolean	Is it available?

4.2. Static Routing Management

4.2.1. Add static routes

- **Interface Description**

Add static routes

- **Request address**

/api/networkmanager/static/routing/add

- **Request method**

POST

- **Request parameter examples**

```
{
 "interface": "string",
 "target": "",
 "netmask": "",
 "gateway": "",
 "metric": 0,
 "mtu": 1500
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
interface	String	True	network port
target	String	True	Static route destination address
netmask	String	True	Subnet mask
gateway	String	True	gateway
metric	Integer	True	Routing metric
mtu	Integer	True	Maximum Transmission Unit

- **Response Example**

```
{
 "result": "ok",
 "msg": ""
}
```

- **Response parameter description**

none

4.2.2. Obtain the static route list

- **Interface Description**

Get the list of static routes

- **Request address**

/api/networkmanager/static/routing/get

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
   {
    "interface": "eth0",
    "target": "192.168.43.1",
    "netmask": "255.255.255.255",
    "gateway": "192.168.43.254",
    "metric": 0,
    "mtu": 1500,
    "status": 0,
    "id": 2
   }
 ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
interface	String	Network port name
target	String	Static route destination address
netmask	String	Subnet mask
gateway	String	gateway

metric	Integer	Routing metric
mtu	Integer	Maximum Transmission Unit
status	Integer	Network port status
id	Integer	ID

4.2.3. Modify static routes

- **Interface Description**

Modify static routes

- **Request address**

/api/networkmanager/static/routing/modify

- **Request method**

POST

- **Request parameter examples**

```
{
  "id": 0,
  "interface": "string",
  "target": "08.250.62.235",
  "netmask": "00.249.250.250",
  "gateway": "255.250.253.091",
  "metric": 0,
  "mtu": 1500
}
```

- **Request Parameter Description**

For parameter descriptions, please refer to 4.2.1.

- **Response Example**

```
{
  "result": "ok",
  "msg": ""
}
```

- **Response parameter description**

none

4.2.4. Delete static routes

- **Interface Description**

Delete static route

- **Request address**

/api/networkmanager/static/routing/del

- **Request method**

POST

- **Request parameter examples**

```
{
  "ids": 0
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ids	Integer	True	Static route ID

- **Response Example**

```
{
  "result": "ok",
  "msg": ""
}
```

- **Response parameter description**

none

4.2.5. Static Routing Switch

- **Interface Description**

Static route switch

- **Request address**

/api/networkmanager/static/routing/set

- **Request method**

POST

- **Request parameter examples**

```
{
 "id": 2,
 "status":
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	Integer	True	Static route ID
status	Integer	True	Enable or disable?

- **Response Example**

```
{
 "result": "ok",
 "msg": ""
}
```

- **Response parameter description**

none

4.3. WiFi Management

4.3.1. Add WIFI

- **Interface Description**

Add WIFI

- **Request address**

/api/networkmanager/wifi/add

- **Request method**

POST

- **Request parameter examples**

```
{
 "wifi_ssid":"KILOVIEW",
 "wifi_bssid":"",
 "wifi_encryption":4,
 "wifi_password":"Kiloview001",
```

```
 "param_autoconn":true,
 "param_addr_solv":"dhcp",
 "ip_address":"",
 "netmask":"",
 "gateway":"",
 "dns":"",
 "dns2":"",
 "mac_address":"
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
wifi_ssid	String	True	WIFI name
wifi_bssid	String	True	WIFI bssid
wifi_encryption	Integer	True	Encryption method
encryption: encryption method No password verification: 0 Validation using WPA: 1 Validation using WPA-PSK: 2 Validation using WPA2: 3 Validation using WPA2-PSK: 4			
wifi_password	String	True	WiFi password
param_autoconn	Boolean	True	Automatic connection?
param_addr_solv	String	True	IP Acquisition Method
param_addr_solv: IP address acquisition method DHCP Automatic Acquisition: dhcp Manually specify: static			
ip_address	String	True	IP address
netmask	String	True	Subnet mask
gateway	String	True	gateway

DNS	String	True	DNS
dns2	String	True	DNS2
mac_address	String	True	MAC

- **Response Example**

```
{result: "ok"}
```

- **Response parameter description**

none

4.3.2. Retrieve the list of saved Wi-Fi networks

- **Interface Description**

Get the list of saved Wi-Fi networks

- **Request address**

/api/networkmanager/wifi/get

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "result": "ok",
   "data": [
      {
         "wifi_ssid": "KILOVIEW_5G",
         "wifi_bssid": "78:45:58:4b:74:fa",
         "wifi_password": "kiloview001",
         "wifi_encryption": 4,
         "wifi_signal": -65,
         "param_autoconn": true,
         "mac_address": "2c:c3:e6:ed:95:fd",
         "param_addr_solv": "dhcp",
         "netmask": "255.255.255.0",
         "ip_address": "192.168.230.113",
```

```
        "gateway": "192.168.230.254",
        "dns": "",
        "dns2": "",
        "hw_mode": "2.4G/5G",
        "enable": true,
        "state": 1,
        "active_disconnect": false,
        "network_id": 1
      }
  ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
wifi_ssid	String	WIFI name
wifi_bssid	String	WIFI bssid
wifi_password	String	WiFi password
wifi_encryption	Integer	Encryption method
wifi_signal	Integer	WIFI signal
param_autoconn	Boolean	Automatic connection?
mac_address	String	MAC
param_addr_solv	String	IP Acquisition Method
netmask	String	Subnet mask
ip_address	String	IP address
gateway	String	gateway
DNS	String	DNS
dns2	String	DNS2
hw_mode	String	hw mode
enable	Boolean	Is it available?
state	Integer	state

active_disconnect	Boolean	Should I actively disconnect?
network_id	Integer	ID generated when adding Wi-Fi

4.3.3. Obtain information about the currently connected Wi-Fi network.

- **Interface Description**

Get information about the currently connected Wi-Fi network

- **Request address**

/api/networkmanager/wifi/getCurrentWifi

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "result": "ok",
   "data": {
      "wifi_ssid": "KILOVIEW_5G",
      "wifi_bssid": "78:45:58:4b:74:fa",
      "wifi_password": "kiloview001",
      "wifi_encryption": 4,
      "wifi_signal": -65,
      "param_autoconn": true,
      "mac_address": "2c:c3:e6:ed:95:fd",
      "param_addr_solv": "dhcp",
      "netmask": "255.255.255.0",
      "ip_address": "192.168.230.113",
      "gateway": "192.168.230.254",
      "dns": "",
      "dns2": "",
      "hw_mode": "2.4G/5G",
      "enable": true,
      "state": 1,
      "active_disconnect": false,
      "network_id": 1
   }
}
```

- **Response parameter description**

For parameter descriptions, please refer to 4.3.2.

4.3.4. Obtain corresponding information based on the WIFI name

- **Interface Description**

Get the corresponding content based on the Wi-Fi name

- **Request address**

/api/networkamanager/wifi/getWifiName

- **Request method**

GET

- **Request parameter examples**

```
/api/networkamanager/wifi/getWifiName?wifi_ssid=KILOVIEW_5G
```

- **Request Parameter Description**

wifi_ssid: WiFi name

- **Response Example**


```
{
 "result": "ok",
 "data": {
  "wifi_ssid": "KILOVIEW_5G",
  "wifi_bssid": "",
  "wifi_password": "kiloview001",
  "wifi_encryption": 4,
  "wifi_signal": -70,
  "param_autoconn": true,
  "mac_address": "",
  "param_addr_solv": "dhcp",
  "netmask": "",
  "ip_address": "",
  "gateway": "",
  "dns": "",
  "dns2": "",
  "enable": true,
  "active_disconnect": false,
  "network_id": 1,
  "hw_mode": "2.4G/5G"
 }
}
```


- **Response parameter description**

For parameter descriptions, please refer to 4.3.2.

4.3.5. Modify WIFI

- **Interface Description**

Modify WIFI

- **Request address**

/api/networkmanager/wifi/modify

- **Request method**

POST

- **Request parameter examples**

```
{
 "wifi_ssid":"KILOVIEW_5G",
 "wifi_bssid":"78:45:58:4b:74:fa",
 "wifi_encryption":4,
 "wifi_password":"kiloview001",
 "param_autoconn":true,
 "param_addr_solv":"dhcp",
 "ip_address":"192.168.230.113",
 "netmask":"255.255.255.0",
 "gateway":"192.168.230.254",
 "dns":"",
 "dns2":"",
 "mac_address":"2c:c3:e6:ed:95:fd"
}
```

- **Request Parameter Description**

For parameter descriptions, please refer to 4.3.1.

- **Response Example**

```
{result: "ok", msg: null}
```

- **Response parameter description**

none

4.3.6. Forget about Wi-Fi

- **Interface Description**

Forgot about WIFI

- **Request address**

/api/networkmanager/wifi/del

- **Request method**

POST

- **Request parameter examples**

```
{"wifi_ssid":"KILOVIEW"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
wifi_ssid	String	True	WIFI name

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

4.3.7. WiFi Connection and Disconnection

- **Interface Description**

WIFI connection and disconnection

- **Request address**

/api/networkmanager/wifi/set

- **Request method**

POST

- **Request parameter examples**

```
{"enable":false,"wifi_ssid":"KILOVIEW_5G"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
wifi_ssid	String	True	WIFI name

enable	Boolean	True	Connect or disconnect

- **Response Example**

```
{"result":"ok","msg":"WiFi disconnected successfully!"}
```

- **Response parameter description**

none

4.3.8. WiFi Scan

- **Interface Description**

WiFi Scan

- **Request address**

/api/networkmanager/wifi/getScanWIFI

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "result": "ok",
  "data": [
    {
      "wifi_signal": -41,
      "akm": true,
      "wifi_ssid": "KILOVIEW",
      "save": false
    },
    {
      "wifi_signal": -46,
      "akm": true,
      "wifi_ssid": "KILOVIEW_5G",
      "save": true
    },
    {
      "wifi_signal": -46,
      "akm": true,
      "wifi_ssid": "kiloview-YanShi",
      "save": false
```

```
    },
    {
      "wifi_signal": -49,
      "akm": true,
      "wifi_ssid": "kiloview-YanShi_5G",
      "save": false
    },
    {
      "wifi_signal": -49,
      "akm": false,
      "wifi_ssid": "NND3D4_2.4G",
      "save": false
    },
    {
      "wifi_signal": -51,
      "akm": true,
      "wifi_ssid": "DIRECT-2e-HP 2606 LaserJet Tank",
      "save": false
    },
    {
      "wifi_signal": -52,
      "akm": false,
      "wifi_ssid": "NND3D4_5G",
      "save": false
    },
    {
      "wifi_signal": -53,
      "akm": true,
      "wifi_ssid": "P3_9eda5e",
      "save": false
    },
    {
      "wifi_signal": -57,
      "akm": true,
      "wifi_ssid": "HUAWEI-1F4YS6",
      "save": false
    },
    {
      "wifi_signal": -64,
      "akm": true,
      "wifi_ssid": "P3_f7f07d",
      "save": false
    },
    {
      "wifi_signal": -70,
      "akm": true,
      "wifi_ssid": "KLL 2219",
      "save": false
    }
  ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
wifi_signal	Integer	WIFI signal

akm	Boolean	Encryption required
wifi_ssid	String	WIFI name
save	Boolean	Save?

4.3.9. Obtaining National Wi-Fi Standards

- **Interface Description**

Obtaining WIFI national standards

- **Request address**

GET

- **Request method**

/api/networkmanager/wifi/getWifiNationalCode

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
   "result": "ok",
   "data": [
      {
         "key": "quanqiu1",
         value: "0x00"
      },
      {
         "key": "quanqiu2",
         value: "0x09"
      }
   ]
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
key	String	Standards or National

value	String	code

4.4. Hotspot sharing

4.4.1. Hotspot On and Off

- **Interface Description**

Hotspot on and off

- **Request address**

/api/networkmanager/hotspot/set

- **Request method**

POST

- **Request parameter examples**

```
{
 "hotspot_ssid":"P3_ed95fd",
 "hotspot_hidden":0,
 "hotspot_password":"12345678",
 "ipRange":"192.168.140.",
 "hotspot_channel":6,
 "enable":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
hotspot_ssid	String	True	Hotspot Name
hotspot_hidden	Integer	True	Hide hotspot
hotspot_password	String	True	Hotspot Password
ipRange	String	True	IP network segment
hotspot_channel	Integer	True	Channel
enable	Boolean	True	Enable hotspot

- **Response Example**

{"result":"ok","msg":"Successfully opened WIFI hotspot sharing!"}

- **Response parameter description**

none

4.4.2. Obtaining detailed information about hotspots

- **Interface Description**

Get detailed information about hot topics

- **Request address**

/api/networkmanager/hotspot/get

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "result": "ok",
   "data": {
      "hotspot_ssid": "P3_ed95fd",
      "hotspot_password": "12345678",
      "hotspot_hidden": 0,
      "hw_mode": "g",
      "hw_mode_name": "2.4G/5G",
      "hotspot_channel": 6,
      "ipRange": "192.168.140.",
      "ipPrefix": "24",
      "enable": true,
      "gateway": "192.168.140.254",
      "mac_address": "2e:c3:e6:ed:95:fd",
      "connect_number": 0
   }
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
hotspot_ssid	String	Hotspot Name

hotspot_password	String	Hotspot Password
hotspot_hidden	Integer	Hide hotspot
hw_mode	String	WIFI mode
hw_mode_name	String	WIFI mode name
hotspot_channel	Integer	Channel
ipRange	String	IP network segment
ipPrefix	String	IP prefix
enable	Boolean	Enable or disable?
gateway	String	gateway
mac_address	String	MAC
connect_number	Boolean	Number of connections

4.4.3. Obtaining Advanced WiFi Parameters

- **Interface Description**

Get advanced WiFi settings

- **Request address**

/api/networkmanager/hotspot/getWIFIParameter

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result":"ok",
 "data":{
```

```
  "country_code":"ALL",
  "roaming":false
 }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
country_code	String	Country/Region/Standard
roaming	Boolean	Enable cross-hotspot roaming?
roaming_rssi_thres	Integer	Used to set signal strength thresholds when devices roam across hotspots.
roaming_scan_intv	Integer	(Scan Interval Time) is used to set the scan interval when devices roam across hotspots.

4.4.4. Advanced WiFi Parameter Settings

- **Interface Description**

WIFI advanced parameter settings

- **Request address**

/api/networkmanager/hotspot/setWIFIParameter

- **Request method**

POST

- **Request parameter examples**

```
{
 "country_code":"ALL",
 "roaming":false,
 "roaming_rssi_thres":5,
 "roaming_scan_intv":5
}
```

- **Request Parameter Description**

For parameter descriptions, please refer to 4.4.3.

- **Response Example**

{"result": "ok"}

- **Response parameter description**

none

4.4.5. Obtaining the WIFI Channel

- **Interface Description**

Get the WiFi channel

- **Request address**

/api/networkmanager/hotspot/getWiFiChannel

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

["1","2","3","4","5","6","7","8","9","10","11","36","40","44","48","52","56","60","64","100","104","108",
"112","116","120","124","128","132","136","140","144","149","153","157","161","165"]

- **Response parameter description**

WIFI Channel List

4.4.6. Obtaining the WiFi hotspot frequency band

- **Interface Description**

Obtain WiFi hotspot frequency band

- **Request address**

/api/networkmanager/hotspot/getHotspotFrequencyBand

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
[
  {"key": "2.4G","value": "g"},
  {"key": "5G","value": "a"},
  {"key": "2.4G/5G","value": "n"}
]
```

- **Response parameter description**

Parameter name	Parameter type	describe
key	String	frequency band
value	String	Frequency band name

4.5. 4G/5G Management / Modem Management

4.5.1. Retrieve all SIM card list data

- **Interface Description**

Get all SIM card list data

- **Request address**

/api/networkmanager/modem/get

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result": "ok",
 "data": [
   {
```

```
    "modem_name": "modem1",
    "modem_Operator": "",
    "insert_card": false,
    "modem_number": "",
    "modem_net_play": "",
    "ip_address": "",
    "apn": "",
    "username": "",
    "password": "",
    "pin": "",
    "version": "",
    "enable": false,
    "id": 1,
    "modem_signal": 0,
    "sort": 5,
    "wwan_name": "",
    "network_mode": "AUTO",
    "process_pid": null,
    "network_card": false,
    "auth": 1,
    "enable_5G": false,
    "device_name": "",
    "enable_card": true,
    "signal_version": "",
    "modem_rsrp": 0,
    "modem_sinr": 0,
    "imei": "",
    "pin_status": 10
   }
  ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
modem_name	String	Card slot name
modem_Operator	String	Operators
insert_card	Boolean	Is a card inserted?
modem_number	String	SIM card CCID
modem_net_play	String	Is it possible to access the internet?
ip_address	String	IP address
APN	String	APN Configuration
username	String	username

password	String	password
pin	String	SIM card PIN code
version	String	Network type
enable	Boolean	Is the card slot enabled?
id	Integer	Unique Identifier
modem_signal	Integer	signal strength
sort	Integer	Sort field
wwan_name	String	Network interface name
network_mode	String	5G network mode
process_pid	String	Process ID
network_card	Boolean	Network card type
auth	Integer	Authentication method
enable_5G	Boolean	Enable 5G
device_name	String	Device serial port
enable_card	Boolean	Card slot start/stop status
signal_version	String	Signal version
modem_rsrp	Integer	Signal receiving power
modem_sinr	Integer	Signal-to-noise ratio
imei	String	SIM card IMEI
pin_status	Integer	SIM card PIN status

4.5.2. Obtain SIM card information based on SIM number

- **Interface Description**

Retrieve SIM list data based on SIM card number

- **Request address**

/api/networkmanager/modem/getModemByNumber

- **Request method**

GET

- **Request parameter examples**

```
/api/networkmanager/modem/getModemByNumber?modem_number=modem1
```

- **Request Parameter Description**

none

- **Response Example**


```
{
 "modem_name": "modem1",
 "modem_Operator": "CHN-UNICOM",
 "insert_card": true,
 "modem_number": "89852351023050349492",
 "modem_net_play": "1",
 "ip_address": "10.215.72.17",
 "apn": "",
 "username": "",
 "password": "",
 "pin": "",
 "version": "4G",
 "enable": true,
 "id": 1,
 "modem_signal": -67,
 "sort": 5,
 "wwan_name": "wwan0",
 "network_mode": "AUTO",
 "process_pid": "15989",
 "network_card": true,
 "auth": 1,
 "enable_5G": false,
 "device_name": "/dev/ttyUSB2",
 "enable_card": true,
 "signal_version": "4G",
 "module_name": "EG25-G"
}
```


- **Response parameter description**

For parameter descriptions, please refer to 4.5.1.

4.5.3. Obtain APN Information

- **Interface Description**

Get APN related information

- **Request address**

/api/networkmanager/modem/getAPN

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result": "ok",
 "data": [
   {
    "label": "China_Taiwan",
    "children": [
      {
       "label": "Chunghwa Telekom",
       "value": "emome
      }
    ]
   }
 ]
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
label	String	Country Name
children	String	APN List
label	String	Operator Name
value	String	APN Name

4.5.4. SIM Card Parameter Configuration

- **Interface Description**

SIM card parameter configuration

- **Request address**

/api/networkmanager/modem/setModemParameter

- **Request method**

POST

- **Request parameter examples**

```
{
 "version":"5G",
 "modem_name":"modem3",
 "modem_number":"",
 "device_name":"/dev/ttyUSB3",
 "ip_address":"",
 "enable_5G":false,
 "network_mode":"AUTO",
 "apn":"",
 "username":"",
 "password":"",
 "pin":"",
 "auth":1
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
version	String	True	Module version
modem_name	String	True	Card slot name
modem_number	String	True	SIM card CCID
device_name	String	True	Serial port device name
ip_address	String	True	IP address
enable_5G	Boolean	True	Enable 5G
network_mode	String	True	5G mode
network_mode: 5G mode AUTO: AUTO SA:SA NSA: NSA			

APN	String	True	APN Configuration
username	String	True	username
password	String	True	password
pin	String	True	SIM card PIN code
auth	Integer	True	SIM card authentication method
auth: SIM card authentication method PAP: 1 CHAP: 2 MsChapV2:3			

- **Response Example**

```
{"result":"ok","msg":"Successfully set Modem parameters!"}
```

- **Response parameter description**

none

4.5.5. SIM Card Reset

- **Interface Description**

SIM card reset

- **Request address**

/api/networkmanager/modem/modemRestore

- **Request method**

POST

- **Request parameter examples**

```
{"modem_name":"modem3","wwan_name":"usb0"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe

modem_name	String	True	Card slot number
wwan_name	String	True	Network card name

- **Response Example**

```
{"result":"ok","msg":"SIM card reset successful!"}
```

- **Response parameter description**

none

4.5.6. SIM Card Activation or Deactivation

- **Interface Description**

SIM card activation or deactivation

- **Request address**

/api/networkmanager/modem/modemEnable

- **Request method**

POST

- **Request parameter examples**

```
{
 "enable_card":false,
 "modem_name":"modem3",
 "wwan_name":"usb0
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable_card	Boolean	True	Is the SIM card enabled?
modem_name	String	True	Card slot name
wwan_name	String	True	Network port name

- **Response Example**

{"result":"ok","msg":"SIM card enable successful!"}

- **Response parameter description**

none

4.5.7. Obtain IMEI Information

- **Interface Description**

Get IMEI information

- **Request address**

/api/networkmanager/modem/imei_info

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "result": "ok",
 "data": [
  {
   "modem": "modem3",
   "version": "5G",
   "IMEI_code": "869841060061295",
   "insert_card": true,
   "modem_signal": 0,
   "modem_Operator": "",
   "network_card": true
  }
 ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
modem	String	Card slot number
version	String	Module version

IMEI_code	String	Module IMEI number
insert_card	Boolean	Is a card inserted?
modem_signal	Integer	signal strength
modem_Operator	String	Operator Name
network_card	Boolean	Is the module inserted?

5. Kilolink Client

5.1. kilolink/kilolink

5.1.1. Update media encoding information settings

- **Interface Description**

Update media encoding information settings

- **Request address**

/api/kilolink/update_codec_info

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "msg": null
}
```

- **Response parameter description**

none

5.1.2. Enable or disable aggregated streaming

- **Interface Description**

Enable or disable aggregated streaming

- **Request address**

/api/kilolink/bonding/setting_stream

- **Request method**

POST

- **Request parameter examples**

```
{
  "enable": true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Boolean	True	Aggregate Flow Switch

- **Response Example**

```
{
  "result": "ok
}
```

- **Response parameter description**

none

5.1.3. Aggregation and Streaming Status

- **Interface Description**

Aggregated streaming status

- **Request address**

/api/kilolink/bonding/stream_state

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "data": {
    "enable": true
  }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
enable	Boolean	Aggregated streaming status

5.1.4. Enabling or disabling the connection to the Kilolink server

- **Interface Description**

Enable or disable connection to kilolinkserver

- **Request address**

/api/kilolink/bonding/setting

- **Request method**

POST

- **Request parameter examples**

```
{
  "enable": true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Boolean	True	Aggregator server connection switch

- **Response Example**

```
{
  "result": "ok
}
```

- **Response parameter description**

none

5.1.5. Obtaining the Kilolink server connection status

- **Interface Description**

Get Kilolink Server connection status

- **Request address**

/api/kilolink/bonding/state

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "result": "ok",
  "data": {
    "enable": true
  }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
enable	Boolean	Aggregator server connection status

5.1.6. Kilolink Server Remote Push/Pull Stream Status

- **Interface Description**

KilolinkServer Remote Push/Pull Stream Status

- **Request address**

/api/kilolink/bonding/server_stream_state

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
 "result": "ok",
 "data": {
  "enable": true
 }
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
enable	Boolean	Push-pull flow state

5.1.7. Configure Kilolink connection information

- **Interface Description**

Configure Kilolink connection information

- **Request address**

/api/kilolink/bonding/connect

- **Request method**

POST

- **Request parameter examples**

```
{
 IP address: 192.168.35.140
 "port":60000,
 "crypto":false,
 "dynamic_bitrate":1,
 "key":"3dc92ca6",
```

```
  "enable":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
IP	String	True	Service Address
port	Integer	True	Service Port
crypto	Boolean	True	Encryption required
dynamic_bitrate	Integer	True	Enable dynamic bitrate adjustment?
key	String	True	Authorization code
enable	Boolean	True	Is it connected?

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

5.1.8. Obtain Kilolink Server connection configuration information

- **Interface Description**

Get KilolinkServer connection information

- **Request address**

/api/kilolink/bonding/server

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "result": "ok",
  "data": {
     IP address: 192.168.35.140
     "port": 60000,
     "crypto": false,
     "dynamic_bitrate": 1,
     "key": "3dc92ca6",
     "enable": true
  }
}
```


- **Response parameter description**

For parameter descriptions, please refer to section 5.1.7.

5.1.9. Obtain five pieces of historical information from the aggregation server.

- **Interface Description**

Retrieve five pieces of historical information from the aggregation server

- **Request address**

/api/kilolink/bonding/server_conf

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "result": "ok",
  "data": [
     {
        IP address: 175.178.97.152
        "port": 50000,
        "key": "23699c64"
     },
     {
        IP address: 192.168.35.140
        "port": 60000,
        "key": "3dc92ca6"
```

```
    }
  ]
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
IP	String	Service Address
port	Integer	Service Port
key	String	Authorization code

5.1.10. Adding/Removing Aggregation Service Network Interface Selection

- **Interface Description**

Add/remove aggregation service network interface selection

- **Request address**

/api/kilolink/network/select

- **Request method**

POST

- **Request parameter examples**

```
{"ifname":"eth0","enable":false}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
ifname	String	True	Network port name
enable	Boolean	True	Check the box

- **Response Example**

```
{"result":"ok"}
```

- **Response parameter description**

none

6. Codec Service

6.1. Video Input

6.1.1. Obtain EDID Information

- **Interface Description**

Get EDID information

- **Request address**

/api/codec/vin/edid

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
  "edid_priority": "",
  "edid":
"AP///////wAmhQMAQhYDAAshAQOAoFp46mehpVVNoicOUFQhCAABAQEBAQEBAQEBAQEBAQEBA
AAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/ABQMy1FTkNPREVSCi
AgAAAAEAAAAAAAAAAAAAAAAAAAAccC
AznxVF9eXZAfIiEgBRQEEz49PAMHFhIBIwsHB4MQAABtAwwAEAAIACAAYAECA2fYXcQBeIAD4Q8
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAg==",
  "reset": false
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
edid_priority	String	EDID Priority
edid	String	Base64 encoded EDID information
reset	String	Allow EDID reset?

6.1.2. Setting EDID Priority

- **Interface Description**

Set EDID priority

- **Request address**

/api/codec/vin/edid/priority

- **Request method**

POST

- **Request parameter examples**

```
{"edid_priority":"2"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
edid_priority	String	True	EDID Priority

- **Response Example**

```
{result: "ok", msg: ""}
```

- **Response parameter description**

none

6.1.3. Upload EDID information

- **Interface Description**

Upload EDID information

- **Request address**

/api/codec/vin/edid/upload

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

EDID file

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.1.4. Reset EDID Information

- **Interface Description**

Reset EDID information

- **Request address**

/api/codec/vin/edid/reset

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.1.5. Obtaining Video Information

- **Interface Description**

Get video information

- **Request address**

/api/codec/v1/vin/detail

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "signal": "locked",
   "format": "1920x1080p 60Hz",
   "width": 1920,
   "height": 1080,
   "interlaced": false,
   "fps": 60,
   "type": "HDMI",
   "interface": "v1",
   "max_width": 3840,
   "max_height": 2160,
   "max_fps": 60,
   "source": "hdmi",
   "input_encode": null,
   "input_resolution": null,
   "input_fps": null
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
signal	String	signal status
format	String	Video format
width	Integer	Video width
height	Integer	Video height
interlaced	Boolean	Do they intersect?
fps	Integer	Video frame rate
type	String	Video source type
interface	String	Interface Name
max_width	Integer	Maximum video width

max_height	Integer	Maximum video height
max_fps	Integer	Maximum video frame rate
source	String	Video source
input_encode	String	Input encoding format; USB only.
input_resolution	String	Input resolution; USB only.
input_fps	Integer	Input resolution; USB only.

6.1.6. Obtain the list of video sources

- **Interface Description**

Get video source list

- **Request address**

/api/codec/v1/vin/list_source

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
[
  {
    "label": "HDMI",
    value: "hdmi"
  },
  {
    "label": "SDI",
    "value": "sdi
  },
  {
    "label": "USB Camera",
    "value": "uvc
  }
]
```

- **Response parameter description**

Parameter name	Parameter type	describe
label	String	Video source key
value	String	Video source value

6.1.7. Obtain the list of video formats

- **Interface Description**

Get video format list

- **Request address**

/api/codec/v1/vin/list_format

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
[
 "label": "MJPEG",
 "value": "mjpeg",
 "children": [
 {
  "label": "1920X1080",
  value: "1920x1080",
  "children": [
   {
    "label": "30fps",
    value: "30"
   }
  ]
 }
 ]
]
```

- **Response parameter description**

Parameter name	Parameter type	describe

label	String	Encoding format
value	String	value
children	List	Resolution List
label	String	resolution
value	String	value
children	List	Frame rate list
label	String	Frame rate
value	String	value

6.1.8. Modify video source

- **Interface Description**

Modify video source

- **Request address**

/api/codec/v1/vin/source

- **Request method**

POST

- **Request parameter examples**

```
{"source":"sdi"}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
source	String	True	Video source

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.2. Audio

6.2.1. Obtain audio source information for the input channel

- **Interface Description**

Obtain audio source information for the input channel

- **Request address**

/api/codec/v1/audio/input

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
   "source": "auto",
   "sampling": 48000,
   "channels": 2,
   "current_source": "sdi",
   "gain": {
      "hdmi": 0,
      "sdi": 0,
      "linein": 0,
      "uvc": 0
   },
   type: "AUTO"
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
source	String	Audio source
sampling	Integer	Sampling rate
channels	Integer	Number of channels

current_source	String	Current audio source
gain	Object	Gain of all audio sources
type	String	Audio source type

6.2.2. Select the audio input source

- **Interface Description**

Select the audio input source

- **Request address**

/api/codec/v1/audio/input/source

- **Request method**

POST

- **Request parameter examples**

```
{
  "source":"hdmi",
  "gain":{"hdmi":0,"sdi":0,"linein":0,"uvc":0},
  "current_source":"sdi
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
source	String	True	Audio source
gain	Object	True	Volume gain
current_source	String	True	Current audio source

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.2.3. Obtain the source list

- **Interface Description**

Get source list

- **Request address**

/api/codec/v1/audio/input/list_source

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
 [
  {
   "label": "AUTO",
   value: "auto"
  },
  {
   "label": "HDMI",
   value: "hdmi"
  },
  {
   "label": "SDI",
   "value": "sdi
  },
  {
   "label": "Line In",
   "value": "linein
  },
  {
   "label": "USB Camera",
   "value": "uvc
  }
]
```

- **Response parameter description**

Parameter name	Parameter type	describe
label	String	Audio source
value	String	value

6.2.4. Obtain the audio encoding list

- **Interface Description**

Get audio encoding list

- **Request address**

/api/codec/v1/audio/encode/list

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
[
  {
    "name": "Bonding-Only",
    "volume": 0,
    "resample": "fastest",
    "channels": 2,
    "sampleSize": 1024,
    "sampling": 48000,
    "codec": "AAC",
    "bitrate": 128000,
    "sampleWidth": 16,
    "g711Law": "PCMU",
    "chn_map": [
      0,
      1,
      2,
      3
    ],
    "audio_channel_id": 1,
    "id": 1,
    "real_sampling": 48000,
    "audio_source": "hdmi
  }
]
```


- **Response parameter description**

Parameter name	Parameter type	describe
name	String	Encoding name

volume	Integer	Audio gain
resample	String	Resampling
channels	Integer	Number of channels
sampleSize	Integer	Sampling bit depth
sampling	Integer	Sampling rate
codec	String	Encoding method
bitrate	Integer	bit rate
sampleWidth	Integer	Sampling width
g711Law	String	G711 encoding method
chn_map	List	Channel mapping
audio_channel_id	Integer	Audio Channel ID
id	Integer	Audio encoding sequence number
real_sampling	Integer	Actual sampling rate
audio source	String	Audio source

6.2.5. Add audio encoding

- **Interface Description**

Add audio encoding

- **Request address**

/api/codec/v1/audio/encode

- **Request method**

POST

- **Request parameter examples**

```
{
 "id":"",
 "name":"AAC",
 "codec":"AAC",
```

```
 "resample":"fastest",
 "sampling":48000,
 "channels":2,
 "bitrate":64000,
 "g711Law":"PCMU",
 "chn_map":[0,1,2,3]
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
id	String	True	Encoding sequence number
name	String	True	Encoding name
codec	String	True	Encoding method
codec: encoding method AAC: AAC G.711: G711 OPUS: OPUS			
resample	String	True	Resampling strategy
resample: resampling strategy Fastest/Average sound quality: fastest High audio quality / High CPU consumption: common			
sampling	Integer	True	Sampling rate
channels	Integer	True	Number of channels
bitrate	Integer	True	Bitrate
g711Law	String	True	g711 encoding method
g711Law: g711 encoding method u-Law: PCMU a-Law: PCMA			

chn_map	List	True	Channel mapping

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.2.6. Modify audio encoding

- **Interface Description**

Modify audio encoding

- **Request address**

/api/codec/v1/audio/encode/{audio_id}

- **Request method**

PUT

- **Request parameter examples**

```
{
 "id":3,
 "name":"G711",
 "codec":"G711",
 "resample":"fastest",
 "sampling":8000,
 "channels":1,
 "bitrate":128000,
 "g711Law":"PCMU",
 "chn_map":[0,1,2,3]
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
audio_id	String	True	Audio Encoding ID
For parameter descriptions, please refer to 6.2.5.			

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.2.7. Remove audio encoding

- **Interface Description**

Remove audio encoding

- **Request address**

/api/codec/v1/audio/encode/{audio_id}

- **Request method**

DELETE

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.3. Video Encoding

6.3.1. Obtain the current encoding parameter configuration

- **Interface Description**

Get current encoding parameter settings

- **Request address**

/api/codec/v1/venc/settings

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
 {
  "source": "sdi",
  "codec": "H264",
  "enable": true,
  "grey": false,
  "profile": 0,
  "picHeight": 1,
  "picWidth": 1,
  "mode": "CBR",
  "gop": 60,
  "fps": "auto",
  "bitrate": 6000,
  "maxBitrate": 6000,
  "minQp": 10,
  "maxQp": 40,
  "minIQp": 10,
  "minIp": 1,
  "maxIp": 20,
  "deinterlaceMode": "line_doubling",
  "timecode_type": 1,
  "srcHeight": 1080,
  "srcWidth": 1920,
  "subHeight": 360,
  "subWidth": 640,
  "realHeight": 1080,
  "realWidth": 1920,
  "real_fps": 30
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
source	String	Video source
codec	String	Encoding method
enable	Boolean	Enable encoding?
grey	Boolean	Enable grayscale encoding?
profile	Integer	Encoding level
picHeight	Integer	Encoding height

picWidth	Integer	Encoding width
mode	String	Bit rate control method
gop	Integer	Keyframe interval
fps	String	Target frame rate
bitrate	Integer	Target bitrate
maxBitrate	Integer	Maximum bitrate
minQp	Integer	Minimum QP
maxQp	Integer	Maximum QP
minIQp	Integer	Minimum IQP
minIp	Integer	Minimum IP
maxIp	Integer	Maximum IP
deinterlaceMode	String	frame de-framing mode
timecode_type	Integer	SEI Time Code Type
srcHeight	Integer	Video source height
srcWidth	Integer	Video source width
subHeight	Integer	Sub-stream height
subWidth	Integer	Substream width
realHeight	Integer	Actual encoding height
realWidth	Integer	Actual encoded width
real_fps	Integer	True frame rate

6.3.2. Modify encoding parameters

- **Interface Description**

Modify encoding parameters

- **Request address**

/api/codec/v1/venc/settings

- **Request method**

POST

- **Request parameter examples**

```
{
 "codec":"H264",
 "grey":false,
 "profile":0,
 "picHeight":1,
 "picWidth":1,
 "mode":"CBR",
 "gop":60,
 "fps":"auto",
 "bitrate":6000,
 "maxBitrate":6000,
 "minQp":10,
 "maxQp":40,
 "minIQp":10,
 "minIp":1,
 "maxIp":20,
 "deinterlaceMode":"line_doubling",
 "timecode_type":1
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe

Refer to section 6.3.1 for request parameters; only the parameter options are explained here.

codec: encoding method

H.264: H264

H.265: H265

profile: encoding quality

Baseline: 0

Main profile: 1

High profile: 2

mode: Bitrate control mode

CBR - Constant Bit Rate Mode: CBR

VBR - Dynamic Bitrate Mode: VBR

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.3.3. Setting the encoding bitrate

- **Interface Description**

Set encoding bitrate

- **Request address**

/api/codec/v1/venc/bitrate

- **Request method**

POST

- **Request parameter examples**

```
{"bitrate":4000}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
bitrate	Integer	True	Bitrate

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4. Video Processing/VPSS

6.4.1. Retrieving the Image List

- **Interface Description**

Get image list

- **Request address**

/api/codec/vpss/image

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
[
   {
      "size_h": 1080,
      "size_w": 1920,
      "url": "/img/f232aece686c11f0b6df4a53f6e8cf12.png",
      "name": "123",
      "path": "/data/storage/img/f232aece686c11f0b6df4a53f6e8cf12.png",
      "id": "f232aece686c11f0b6df4a53f6e8cf12"
   }
]
```

- **Response parameter description**

Parameter name	Parameter type	describe
size_h	Integer	Image height
size_w	Integer	Image width
URL	String	Image relative path
name	String	Image Name
path	String	absolute path of the image
id	String	Image unique identifier

6.4.2. Uploading Images

- **Interface Description**

Upload Image

- **Request address**

/api/codec/vpss/image

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
Request parameters are form data file: Image binary data name: Image name			

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.3. Deleting Images

- **Interface Description**

Delete image

- **Request address**

/api/codec/vpss/image/{image_id}

- **Request method**

DELETE

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
image_id	String	True	Image unique identifier

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.4. Obtaining a list of still images

- **Interface Description**

Get a list of still images

- **Request address**

/api/codec/vpss/static_frame

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
[
   {
      "size_h": 1080,
      "size_w": 1920,
      "url": "/frame/static_frame.png",
      "path": "/data/storage/frame/static_frame.png",
      "yuv_path": "/data/storage/frame/static_frame.yuv",
      "id": "static_frame",
      "pixel_format": 0
   }
]
```

- **Response parameter description**

Parameter name	Parameter type	describe
size_h	Integer	Image height
size_w	Integer	Image width
URL	String	Image relative path
path	String	absolute path of the image
yuv_path	String	Image YUV data absolute path
id	String	Image unique identifier
pixel_format	Integer	Pixel format

6.4.5. Upload still image

- **Interface Description**

Upload still image

- **Request address**

/api/codec/vpss/static_frame

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
Form data file: image file			

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.6. Reset still frame preset configuration

- **Interface Description**

Reset still frame preset configuration

- **Request address**

/api/codec/vpss/static_frame/reset

- **Request method**

POST

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.7. Obtaining the rotation, mirror, and inversion parameters of the Vpss object video input

- **Interface Description**

Get the rotation, mirror, and flip parameters of the VPSS object video input.

- **Request address**

/api/codec/v1/vpss/input/rmf

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "rotate":0,
  "mirror_en":false,
  "flip_en":false
}
```

- **Response parameter description**

Parameter name	Parameter type	describe
rotate	Integer	Rotation angle
mirror_en	Boolean	Enable mirroring?
flip_en	Boolean	Enable flipping?

6.4.8. Set the rotation, mirror, and invert parameters for the Vpss object video input.

- **Interface Description**

Set the rotation, mirror, and flip parameters for the VPSS object video input.

- **Request address**

/api/codec/v1/vpss/input/rmf

- **Request method**

POST

- **Request parameter examples**

```
{"mirror_en":true}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
rotate	Integer	False	Rotation angle
mirror_en	Boolean	False	Mirror
flip_en	Boolean	False	Flip

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.9. Obtain the OSD overlay list

- **Interface Description**

Get Osd overlay list

- **Request address**

/api/codec/v1/vpss/osd

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**

```
{
  "enable": false,
  "items": [
    {
      "enable": true,
      "type": "text",
      "position": "LeftTop",
      "x": 0,
      "y": 0,
      "font_size": 1,
      "font_color": 1,
      "style": "normal",
      "outline": 0,
      "outline_color": 0,
      "text": "发的发",
      "file_id": "",
      "row_spacing": 1,
      "id": "1cd4b9f068f511f0b6df4a53f6e8cf12"
    },
    {
      "enable": true,
      "type": "time",
      "position": "LeftTop",
      "x": 0,
      "y": 0,
      "font_size": 1,
      "font_color": 1,
      "style": "normal",
      "outline": 0,
      "outline_color": 0,
      "text": "",
      "file_id": "",
      "row_spacing": 1,
      "id": "4caada2e68f511f0b6df4a53f6e8cf12"
    },
    {
      "enable": true,
      "type": "date",
      "position": "LeftTop",
      "x": 0,
      "y": 0,
      "font_size": 1,
      "font_color": 1,
      "style": "normal",
      "outline": 0,
      "outline_color": 0,
      "text": "",
      "file_id": "",
      "row_spacing": 1,
      "id": "50784b0068f511f0b6df4a53f6e8cf12"
    },
    {
      "enable": true,
      "type": "clock",
      "position": "LeftTop",
      "x": 0,
      "y": 0,
      "font_size": 1,
      "font_color": 1,
      "style": "normal",
```

```
        "outline": 0,
        "outline_color": 0,
        "text": "",
        "file_id": "",
        "row_spacing": 1,
        "id": "550de99068f511f0b6df4a53f6e8cf12"
      },
      {
        "enable": true,
        "type": "image",
        "position": "LeftTop",
        "x": 0,
        "y": 0,
        "font_size": 1,
        "font_color": 1,
        "style": "normal",
        "outline": 0,
        "outline_color": 0,
        "text": "",
        "file_id": "5d87689e68f511f0b6df4a53f6e8cf12",
        "row_spacing": 1,
        "id": "66759b4268f511f0b6df4a53f6e8cf12",
        "name": "123",
        "pic_url": "/img/5d87689e68f511f0b6df4a53f6e8cf12.png"
      }
    ]
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
enable	Boolean	Enable OSD?
items	List	Material List
enable	Boolean	Enable materials?
type	String	Material Type
position	String	Location
x	Integer	Horizontal coordinates
y	Integer	Vertical coordinates
font_size	Integer	Font size
font_color	Integer	Font color
style	String	Font Style

outline	Integer	Outer border style
outline_color	Integer	Outer border color
text	String	Text content
file_id	String	File ID
row_spacing	Integer	line spacing
id	String	Material ID

6.4.10. OSD Master Switch

- **Interface Description**

OSD switch

- **Request address**

/api/codec/v1/vpss/osd

- **Request method**

PUT

- **Request parameter examples**

```
{"enable":true}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Boolean	True	OSD switch

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.11. Add OSD information

- **Interface Description**

Add OSD information

- **Request address**

/api/codec/v1/vpss/osd

- **Request method**

POST

- **Request parameter examples**

```
{
 "id":"",
 "type":"text",
 "file_id":"",
 "text":"1234",
 "x":0,
 "y":0,
 "position":"LeftTop",
 "font_size":1,
 "style":"normal",
 "outline":0,
 "font_color":1,
 "outline_color":0,
 "enable":true
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
enable	Boolean	True	Enable materials?
file_id	String	True	File ID
font_color	Integer	True	Font color
font_color: Font color Black: 0 White: 1 Red: 2 Blue: 3 Green: 4 Yellow: 5 Purple: 6			

Cyan: 7			
font_size	Intger	True	Font size
id	String	True	Material ID
outline	Integer	True	Outer border style
outline: outer border style None: 0 Thin border: 1 Thick border: 2			
outline_color	Integer	True	Outer border color
outline_color: Color of the outer border Same font color			
position	String	True	Material location
position: material position Top left corner: LeftTop Centered at the top: TopCenter Top right corner: RightTop Bottom left corner: LeftBottom Bottom Center Bottom right corner: RightBottom The very center: Center Custom: Manual			
style	String	True	Font Style
style: font style Normal Bold:			

text	String	True	text
type	String	True	Material Type
type: Material type Text: text Time and date: time Date: Time: clock Image: image			
x	Integr	True	Horizontal position
y	Integr	True	Vertical position

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.12. Obtain OSD overlay material information

- **Interface Description**

Get OSD overlay material information

- **Request address**

/api/codec/v1/vpss/osd/{osd_id}

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe

osd_id	String	True	Material ID

- **Response Example**

```
{
        "enable": true,
        "type": "image",
        "position": "Manual",
        "x": 1,
        "y": 1,
        "font_size": 1,
        "font_color": 2,
        "style": "bold",
        "outline": 0,
        "outline_color": 0,
        "text": "1234",
        "file_id": "5d87689e68f511f0b6df4a53f6e8cf12",
        "row_spacing": 1,
        "id": "67ad55e868f711f0b6df4a53f6e8cf12",
        "name": "123",
        "pic_url": "/img/5d87689e68f511f0b6df4a53f6e8cf12.png"
    }
```

- **Response parameter description**

For parameter descriptions, please refer to 6.4.9.

6.4.13. Modify OSD materials

- **Interface Description**

Modify OSD materials

- **Request address**

/api/codec/v1/vpss/osd/{osd_id}

- **Request method**

PUT

- **Request parameter examples**

```
{
 "id":"67ad55e868f711f0b6df4a53f6e8cf12",
 "type":"text",
 "file_id":"5d87689e68f511f0b6df4a53f6e8cf12",
 "text":"1234",
 "x":1,
 "y":1,
 "position":"Manual",
 "font_size":1,
 "style":"bold",
 "outline":0,
```

```
 "font_color":2,
 "outline_color":0,
 "enable":true
}
```

- **Request Parameter Description**

For parameter descriptions, please refer to 6.4.11.

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.14. Delete OSD materials

- **Interface Description**

Delete OSD materials

- **Request address**

/api/codec/v1/vpss/osd/{osd_id}

- **Request method**

DELETE

- **Request parameter examples**

none

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
osd_id	String	True	Material ID

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.4.15. Adjust the size of Xiaoping's output screen.

- **Interface Description**

Adjust the output screen size

- **Request address**

/api/codec/v1/vpss/output

- **Request method**

POST

- **Request parameter examples**

```
{
 "left": 800,
 "right": 800,
 "top": 480,
 "down": 480,
 "rotation": 0
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
left	Integer	True	Left margin
right	Integer	True	Right distance
top	Integer	True	top margin
down	Integer	True	Bottom margin
rotation	Integer	True	Rotation angle

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none

6.5. Small screen/Panel

6.5.1. Obtain information such as encoded video.

- **Interface Description**

Obtain information such as encoded videos

- **Request address**

/api/codec/panel/settings

- **Request method**

GET

- **Request parameter examples**

none

- **Request Parameter Description**

none

- **Response Example**


```
{
 "video_source": "sdi",
 "width": 1,
 "height": 1,
 "video_bitrate": 4000,
 "codec": "H264",
 "fps": "auto",
 "audio_source": "hdmi",
 "current_source": "hdmi",
 "gain": {
  "hdmi": 0,
  "sdi": 0,
  "linein": 0,
  "uvc": 0
 },
 "deinterlaceMode": "line_doubling"
}
```


- **Response parameter description**

Parameter name	Parameter type	describe
video source	String	Video source
width	Integer	Video width

height	Integer	Video height
video_bitrate	Integer	Video bitrate
codec	String	Encoding method
fps	String	Frame rate
audio source	String	Audio source
current_source	String	Current audio source
gain	Object	Volume gain
deinterlaceMode	String	frame de-framing mode

6.5.2. Modify information such as encoded video.

- **Interface Description**

Modify encoded video and other information

- **Request address**

/api/codec/panel/settings

- **Request method**

POST

- **Request parameter examples**

```
{
 video_source": "hdmi",
 "codec": "H265",
 "height": 1080,
 "width": 1920,
 "video_bitrate": 4000,
 "fps": 30,
 "audio_source": "hdmi",
 "deinterlaceMode": "line_doubling", gain:0
}
```

- **Request Parameter Description**

Parameter name	Parameter type	Is this field required?	describe
video source	String	True	Video source

video_source: video source HDMI: HDMI SDI: sdi USB: UVC			
codec	String	True	Encoding method
codec: encoding method H.264: H264 H.265: H265			
height	Integer	True	Video height
width	Integer	True	Video width
video_bitrate	Integer	True	Video bitrate
fps	String	True	Frame rate
audio source	String	True	Audio source
audio_souce: audio source AUTO: auto HDMI: HDMI SDI: sdi Line In: line-in USB: UVC			
deinterlaceMode	String	True	frame de-framing mode

- **Response Example**

```
{"result":"ok","msg":""}
```

- **Response parameter description**

none