

Open API for energy management platform

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API specifications

The API request URL	http://english.energyy.ucskype.com/internal/commonInternal.jsp
parameter	requestParams
The data format	JSON
Request way	Get/post

The API list

The public API

Meter management function, application layer function

Regional group

ReadAll	
Request way	POST
Parameter(requestParams)	
requestParams	{"action": "comApi", "method": "getAreaOrg", "param": {"username": "", "password": ""}}
The sample	{"action": "comApi", "method": "getAreaOrg", "param": {"username": "test", "password": "test"}}
Response parameter	1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: {"data": [{"areaid": 3, "areaName": "Dubai Festival City", "parentId": 0}, {"areaid": 4, "areaName": "WAHA Community", "parentId": 3}], "errcode": "0", "errmsg": "Add Successful!!!"}

Price plan

addMeterPrice	
Request way	POST
Parameter(requestParams)	

requestParams	Param			
	Parameter	Type	Necessary	Description
	energyTypes	String	yes	energy type: WATER,//add to energy water ELECTRICITY, //add to energy electricity HEATING,//add to energy heating GAS,//add to energy gas LIQUEFIEDGAS, //add to energy liquefied gas
	priceName	String	Yes	name
price	String	Yes	price	
The sample	<pre>{ "action": "comApi", "method": "addMeterPrice", "params": { "energyTypes": "WATER", "priceName": "waterPrice01", "price": "10" } }</pre>			
Response parameter	<p>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"}</p> <p>2. success:</p> <pre>{ "errcode": "0", "errmsg": "Added successfully!!", "priceId": "16" }</pre>			

Edit	
Request way	POST
Parameter(requestParams)	
requestParams	{"action": "comApi", "method": "modifyMeterPrice", "param": {"priceld": "priceld", "priceName": "The name of the price plan, unique", "price": "unit price(1m³)"}}
The sample	{"action": "comApi", "method": "addMeterPrice", "param": {"priceName": "gasPrice01", "price": "10"}}
Response parameter	1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: {"errcode": "0", "errmsg": "success message", "priceld": "id"}
ReadAll	
Request	POST

way	
Parameter(requestParams)	
requestParams	{"action": "comApi", "method": "readAllPrices"}
The sample	{"action": "comApi", "method": "readAllPrices"}
Response parameter	1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: {"errcode": "0", "errmsg": "success message", "data": "pricelist"}

readAllPricesV2	
Request way	POST
Parameter(requestParams)	
requestParams	{"action": "comApi", "method": "readAllPricesV2"}
The sample	{"action": "comApi", "method": "readAllPricesV2"}
Response parameter	1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: {"errcode": "0", "errmsg": "search successful!", "data": [{"pricelid": "id", "priceName": "price name", "createDate": "creation time", "energyType": "meter type", "flatPrice": "shoulder price", "peakPrice": "peak price", "valleyPrice": "off-peak price", "tipPrice": "sharp price", "price": "price"}]}
The sample response	{"errcode": "0", "errmsg": "search successful!", "data": [{"pricelid": 9, "priceName": "water_price", "createDate": "2018-11-13", "energyType": "WATER", "price": 2}, {"pricelid": 12, "priceName": "elec_price", "createDate": "2019-06-01", "energyType": "ELECTRICITY", "flatPrice": 1.1, "peakPrice": 1.1, "valleyPrice": 1.1, "tipPrice": 1.1}, {"pricelid": 13, "priceName": "gas_price", "createDate": "2019-07-02", "energyType": "GAS", "price": 9}]}

meter file management

Add meter

Add meter	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEui: 16-byte hexadecimal string, device unique identifier 2. customerName: Customer name using gas meter 3. customerPhone: Customer phone using gas meter 4. customerAddress: Customer Address using gas meter 5. customerCertificateNumber: Customer's unique identification number 6. pricelid: Unique ID of the price plan

	<p>7. reading:Initial reading.If not filled, it is 0.</p> <p>8. overdraftMoney:Overdraft amount.If it is less than the overdraft amount, the valve closing command is issued.If not filled, it is 0.</p> <p>9. customerFee:Initialize customer balance. If not filled, it is 0.</p> <p>10. normalDayDosage: a value per day consumption. If not filled, it is 0.</p> <p>11. valveState:Valve status of gas meter.0-close, 1-open,2-unknown</p> <p>12. gasType: 0:postpaid(1500); 1:prepaid(1500), 2:postpaid(G4.0-100),3:prepaid(other-60) note:1500 Postpaid + 1500 Prepaid + 100 (G4.0) Postpaid + additional 60 Prepaid</p> <p>13. areald: Area id,long type</p> <p>14. equipmentModelId:Device model ID,long type, The default is 3</p>
The sample	<pre>{"action":"comApi","method":"addMeter","param":{"devEui":"8cf9572000015514","customerName":"DIPMeter041","customerPhone":"13589541252","customerAddress":"dubai","customerCertificateNumber":"5698741526","pricelId":"2","reading":"0","overdraftMoney":"0","customerFee":"150","normalDayDosage":"10","valveState":"0","meterType":"0","areald":"8"}}</pre>
Response parameter	<p>1. failure: {"errcode":"-31/-1","errmsg":"failure message"}</p> <p>2. success:{"errcode":"0","errmsg":"Add Successful!!"}</p>

Edit meter

Edit meter	
Request way	POST
Parameter(requestParams)	
requestParams	<p>1. devEui:16-byte hexadecimal string, device unique identifier</p> <p>2. customerName:Customer name using gas meter,it can be empty</p> <p>3. customerPhone:Customer phone using gas meter,it can be empty</p> <p>4. customerAddress:Customer Address using gas meter,it can be empty</p> <p>5. customerCertificateNumber:Customer's unique identification number,it can be empty</p> <p>6. pricelId:Unique ID of the price plan,it can be empty</p> <p>7. reading:Initial reading.it can be empty</p> <p>8. overdraftMoney:Overdraft amount.If it is less than the overdraft amount, the valve closing command is issued.it can be empty</p> <p>9. customerFee:Initialize customer balance.it can be empty</p> <p>10. normalDayDosage: a value per day consumption.it can be empty</p>

	<p>11. valveState:Valve status of gas meter.0-close,1-open,2-unknown</p> <p>12. gasType: 0:postpaid(1500); 1:prepaid(1500) 2:postpaid(G4.0-100) 3:prepaid(other-60)</p> <p style="text-align: center;">note:1500 Postpaid +1500 Prepaid + 100 (G4.0) Postpaid + additional 60 Prepaid</p>
The sample	<pre>{ "action": "comApi", "method": "modifyMeter", "param": { "devEui": "8cf9572000010105", "customerName": "", "customerPhone": "", "customerAddress": "", "customerCertificateNumber": "", "priceld": "", "reading": "", "overdraftMoney": "", "customerFee": "", "normalDayDosage": "", "valveState": "", "meterType": "meterType" } }</pre>
Response parameter	<p>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"}</p> <p>2. success: {"errcode": "0", "errmsg": "success message"}</p>

List all the meters

List all the meters				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	Necessary	Description
	energyType	String	No	Energy type: WATER("water"), ELECTRICITY("electricity"), HEATING("heating"), GAS("gas"), BUILDINGS("building"), LIQUEFIEDGAS("Liquefied GAS");
	searchContent	String	No	Query content, fuzzy query is available
	areald	Long	Yes	Area id
	pageSize	Long	No	Page (1 by default)
	pageNumber	long	No	Page (Max 100 by default)
	sysconfigEquipmentId	long	No	Device model id
The sample	<pre>{ "action": "comApi", "method": "getAreaArchives", "params": { "energyType": "WATER", </pre>			

	<pre> "pageNumber":"10", "pageSize":"1", "areald":"39", "searchContent":""," "sysconfigEquipmentId":"" } } </pre>
Response parameter	<pre> 1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: { "pageInfo": { "pageTotal": 24, "pageNumber": 1, "pageSize": 1 }, "errcode": "0", "errmsg": "search successful", "values": [{ "id": 2419, // meter id "customerName": "862437040310543", //user name "customerSerialnumber": "USER20200618154211", //user "serialnumber": "20200618154300", //meter address "areaOrgId": 39, //area id "areaOrgName": "Taojin Smart Technology co.,Ltd.", //Area "readings": "0.0000", //current reading "valveStatus": 2, //valve status, 2: unknown, 0: off, 1: on "energyType": "WATER", //energy type, water "phone": "15156678888", //phone number "balance": 88888, //Balance "equipmentModelId": 39 //device model id }] } </pre>

Detail of Water/Electricity/Gas meter

Detail of Water/Electricity/Gas meter	
Request way	POST
Parameter(requestParams)	

requestParameters	Param								
	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Type</th> <th>Necessary</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>long</td> <td>yes</td> <td>Household id</td> </tr> </tbody> </table>	Parameter	Type	Necessary	Description	id	long	yes	Household id
	Parameter	Type	Necessary	Description					
id	long	yes	Household id						
The sample	<pre>{ "action": "comApi", "method": "getAreaArchiveInfo", "params": { "id": 2410 } }</pre>								
Response parameter	<pre>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "errcode": "0", "errmsg": "search successful", "value": { "id": 2419, //meter id "customerName": "862437040310543", //user name "customerSerialnumber": "USER20200618154211", //user number "serialnumber": "20200618154300", //meter address "areaOrgId": 39, //areaid "areaOrgName": "淘金智能科技", //areaname "readings": "0.0000", //current reading "valveStatus": 2, //valve status, 2: unknown, 0: off, 1: on "energyType": "WATER", //energy type, water "phone": "15156678888", //phone number "balance": 8888, //Balance "equipmentModelId": 39 //device model id "priceId": 7, //Price planid "equipmentType": "LORAWAN", //device type "sysconfigMeterModel": 8, //meter modelid "householdNum": 7, //household Id "equipmentModelId": 18 //device modelid } }</pre>								

Household management

Query details of household

Query details of household				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	Necessary	Description
	Id	Long	No	Household id, You can query the Details of this household if you Enter it.
	searchContent	String	No	Query content, Fuzzy query is Available
	areaid	Long	Yes	Area id
	pageSize	Long	No	Page (1 by default)
	pageNumber	long	No	Page (Max 100 by default)
The sample	<pre>{ "action": "comApi", "method": "gethousehold", "params": { "id": "", "pageNumber": "10", "pageSize": "1", "areaid": "39", "searchContent": "" } }</pre>			
Response parameter	<pre>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "pageInfo": { "pageTotal": 2, "pageNumber": 2, "pageSize": 1 }, "errcode": "0", "errmsg": "", "values": [{ "id": 1, //household id "householdName": "Taojin Smart Technology", //Household name</pre>			

	<pre> "householdFee": 0.3,//Household Balance "serialnumber": "000000001",//Household number "phone": "15215945632",//phone number "areaOrgId": 39,//area id "householdAddress": "Columbus plaza">//Household address }] }</pre>
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Add

Add				
Request way	POST			
Parameter(requestParams)				
requestParams	Params			
	Parameter	Type	necessary	Description
	areald	Long	Yes	Area id
	householdName	String	Yes	Household name
	householdAddress	Long	No	address
	householdPhone	Long	No	phone number
	householdPassword	long	No	password, Yes123456 by default
	householdWarnMoney	Long	No	Alarmed balance, 0 by default
householdFee	Long	Yes	Balance in your account	
The sample	<pre> { "action": "comApi", "method": "addHousehold", "params": { "areald": "39", "householdName": "test11", "householdAddress": "address", "householdPhone": "18851678765", "householdPassword": "123456", "householdWarnMoney": "0", "householdFee": 200 } }</pre>			
Response parameter	1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success:			

	<pre>{ "errcode": "0", "errmsg": "succeed", "householdId": 45//household id }</pre>
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Modify

Modify household				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	necessary	Description
	householdName	String	No	Household name
	householdAddress	Long	No	address
	householdPhone	Long	No	phone number
	householdPassword	long	No	password
	householdWarnMoney	Long	No	Alarned Balance
	householdFee	Long	No	Balance in your account
	Id	long	Yes	Household id
The sample	<pre>{ "action": "comApi", "method": "modifyHousehold", "params": { "id": "45", "householdName": "test22", "householdAddress": "address", "householdPhone": "18851678765", "householdPassword": "123456", "householdWarnMoney": "0", "householdFee": 200 } }</pre>			
Response parameter	<p>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"}</p> <p>2. success:</p> <pre>{ "errcode": "0", "errmsg": "succeed", "householdId": 45//household id }</pre>			

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Meter readings or Lora meter status query

Meter readings or Lora meter status query				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	necessary	Description
	searchContent	String	No	Query content, fuzzy query is available
	areald	Long	Yes	Area id
	pageSize	Long	No	Page (1 by default)
	pageNumber	long	No	Page (Max 1000 by default)
	startDate	String	Yes	Start time format: yyyy-MM-dd HH:mm:ss
	endDate	String	Yes	End time format: yyyy-MM-dd HH:mm:ss
energyType	String	No	energy type: WATER("water"), ELECTRICITY("Electricity"), HEATING("heating"), GAS("gas"), BUILDINGS("building"), LIQUEFIEDGAS("liquefied gas")	
The sample	<pre>{ "action": "comApi", "method": "getMeterReadings", "params": { "pageNumber": "1", "pageSize": "1", "areald": "39", "searchContent": "", "energyType": "WATER", "startDate": "2019-07-01 00:00:00", "endDate": "2020-07-01 00:00:00" } }</pre>			
Response parameter	<pre>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "pageInfo": { "pageTotal": 193, "pageNumber": 1,</pre>			

	<pre> "pageSize": 1 }, "errcode": "0", "errmsg": "", "values": [{ "archivesAddress": "20200618154300",//meter address "archivesName": "862437040310543",//user name "archivesNumber": "USER20200618154211",//user number "areaId": 39,//areaid "areaName": "江苏省-无锡市-淘金智能科技",//area name "companyId": 0,// "energyType": "WATER",//energy type, water "freezeReading": "0.0000",//Frozen reading "id": 208271, "isDel": false, "level": "",//Coverage level "margin": "",//liquefied gas cylinder/tank exclusive letter "meterReadingState": "",//meter reading status "meterReadingtime": "2020-06-18 16:23:27",//Meter reading time "operatorId": 0, "pressure": "",//Pressure "sensitivity": "",//sensitivity "signalNoise": "",//signal to noise ratio "signals": "",//signal strenth "type": "LORA",//Meter Type "valve": 2,//status 2: unknown, 1: on, 0.off "voltage": 0//voltage, 0 presents the meter did not report Voltage value }] } </pre>
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Valve Switching record

Valve Switching record	
Request way	POST
Parameter(requestParams)	
requestParam	Param

s	Parameter	Type	necessary	Description
	areald	Long	Yes	Area id
	pageSize	Long	No	Page (1 by default)
	pageNumber	long	No	Page (Max 1000 by default)
	energyType	String	No	energy type: WATER("water"), ELECTRICITY("Electricity"), HEATING("Heating"), GAS("gas"), BUILDINGS("building"), LIQUEFIEDGAS("liquefied gas")
	startDate	String	Yes	Start time format: yyyy-MM-dd HH:mm:ss
	endDate	String	Yes	End time format: yyyy-MM-dd HH:mm:ss
	username	String	No	user name, fuzzy query is available
	userNumber	String	No	user number, fuzzy query is available
	operationType	Long	No	Operation Type: 0: off, 1: on
The sample	<pre>{ "action": "comApi", "method": "getValverecord", "params": { "id": "", "pageNumber": "1", "pageSize": "1", "areald": "39", "userNumber": "", "energyType": "WATER", "username": "", "operationType": "", "startDate": "2019-07-01 00:00:00", "endDate": "2020-07-01 00:00:00" } }</pre>			
Response parameter	<pre>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "pageInfo": { "pageTotal": 16, "pageNumber": 1, "pageSize": 1 }, }</pre>			

	<pre> "errcode": "0", "errmsg": "succeed", "values": [{ "companyId": 0,//reserved letter "energyType": "WATER",//energy type "executionType": 1,// operation Type 0: off, 1: on "id": 585, "isDel": false, //reserved letter "operatorId": 0,//reserved letter "resultInfo": "Keep valve control record",//info "valCause": "",//reserved letter "valueId": 266393, "username": "RHF_dongho_型评_04", //user name "userNumber": "USER20200104135725",//user number "dateTime": "2020-01-10 10:39:57",//operation time "status": "succeed"//executing state }] } </pre>
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Bill

queryMonthBillInfo				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	necessary	Description
	areald	Long	Yes	Area id
	pageSize	Long	No	Page (1 by default)
	pageNumber	long	No	Page (Max 1000 by default)
	energyType	String	No	energy type: WATER("water"), ELECTRICITY("Electricity"), HEATING("Heating"), GAS("gas"), BUILDINGS("building"), LIQUEFIEDGAS("liquefied gas")
	billDate	String	No	Format: yyyy-MM
	username	String	No	user name, fuzzy query is a
userNumber	String	No	user number, fuzzy query is a	

The sample	<pre> { "action": "comApi", "method": "queryMonthBillInfo", "params": { "pageNumber": "1", "pageSize": "1", "username": "", "areaid": "39", "billDate": "2020-06", "energyType": "WATER", "userNumber": "" } } </pre>
Response parameter	<pre> 1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "pageInfo": { "pageTotal": 5, "pageNumber": 1, "pageSize": 1 }, "errcode": "0", "errmsg": "Succeed", "values": [{ "areaName": "哥伦布广场", //areaname "areaOrgId": 39, //areaid "billStatus": "0", //Bill 0: unpaid, 1: paid "customerName": "RHF_dongho_02", //user name "customerSerialnumber": "USER20200103111015", //user number "dosage": "28", //consumption "energyType": 0, //energy type 0Yeswater, 1YesElectricity meter, 3Yesgas meter "fee": 140, //Bill amount "settlementDate": "2020-06" //bill month }] } </pre>

login/logout

Use Household name and password to get area and device model				
Request way	POST			
Parameter(requestParams)				
requestParams	Param			
	Parameter	Type	necessary	Description
	username	String	Yes	username
	password	String	Yes	password
The sample	<pre>{ "action": "comApi", "method": "toLogin", "params": { "username": "karly", "password": "123456" } }</pre>			
Response parameter	<pre>1. failure: {"errcode": "-31/-1", "errmsg": "failure message"} 2. success: { "errcode": "0", "errmsg": "Login successfully", "value": { "adminId": 15, //user Id "email": "11111111@qq.com", //email "username": "karly", //Household name "name": "wanglilin", //name "telPhone": "", //phone number "manageArea": [// managed areas { "areaId": 89, //areaid "areaName": "哥伦布淘金-NB-型评 gas", //areaname "parentId": 38 //area }], "equipmentModel": [//managed device models { "sysconfigEquipmentId": 17, //device modelid "sysEquipmentName": "LoraElectricity 表" //device modelName }], { "sysconfigEquipmentId": 18,</pre>			

	<pre> "sysEquipmentName": "Lora-RHFwater" }, { "sysconfigEquipmentId": 20, "sysEquipmentName": "【LoraWan】gas meter-v2" }] } } </pre>
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LoraWan API

Meter Lorawan data entry, function management

Gateway

Add	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. gwID:gateway ID, 16-byte hexadecimal string, gateway unique identifier 2. gwName:gateway name, Gateway name restrictions are composed of letters and underscores, and the length is no more than 20 characters. 3. gwType:gateway type[for example:"rhf2s208"] 4. region:gateway area[for example:"eu868"] 5. subnet:gateway subnet[for example:"ch_00-07"]
The sample	{ "action": "lorawanApi", "method": "addGateway", "param": { "gwID": "b827ebff ed58048", "gwName": "DIP_Gateway", "gwType": "rhf2s208", "region": "eu868", "subnet": "ch_00-07" } }
Response parameter	<ol style="list-style-type: none"> 1. failure: { "errcode": "-31/-1", "errmsg": "failure message" } 2. success: { "errcode": "0", "errmsg": "success message" }

Edit	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. gwID:gateway ID, 16-byte hexadecimal string, gateway unique identifier 2. gwName:gateway name, Gateway name restrictions are composed of letters and underscores, and the

	length is no more than 20 characters. 3. gwType:gateway type[for example:"rhf2s208"]
The sample	{"action":"lorawanApi","method":"modifyGateway","param":{"gwID":"b827ebffed58048","gwName":"DIP_Gateway","gwType": "rhf2s208"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: {"errcode":"0","errmsg":"success message"}

Read gateway state	
Request way	POST
Parameter(requestParams)	
requestParams	1. gwID:gateway ID, 16-byte hexadecimal string, gateway unique identifier
The sample	{"action":"lorawanApi","method":"readGatewayStatus","param":{"gwID":"b827ebffed58048"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: {"errcode":"0","errmsg":"success message","data": { "gwID": "31b977ffe398501", "gwName": "gateway_01", "gwType": "rhf2s208", "enableClassB": true, "enablePFW": true, "region": "cn470", "subnet": "ch_00-07", "online": false, "mqtt": false, "latitude": 0, "longitude": 0, "altitude": 0, "createtime": 1557020283245 }}}
Response Description	1. gwID:gateway ID, 16-byte hexadecimal string, gateway unique identifier 2. gwNam:gateway name 3. gwType:gateway type 4. region:gateway area 5. subnet:gateway subnet 6. online:whether the gateway is online 7. enableClassB:whether to enable Class B 8. enablePFW:whether to enable pktfwd 9. mqtt:whether the gateway accesses the server in MQTT mode 10. altitude:altitude, need a gateway with GPS 11. latitude:Latitude, need a gateway with GPS 12. longitude:Longitude, need a gateway with GPS 13. createtime:create time in milliseconds

Add LoraWan Meter

Add	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. appID:application ID ,Mirdif_APP:3 ,DIP_APP_V2:4 2. devName:device name,Device name restrictions are composed of letters and underscores, and the length is no more than 20 characters 3. devEUI:16-byte hexadecimal string, device unique identifier 4. appEUI:16-byte hexadecimal string, application unique identifier 5. region:device area 6. subnet:Subnet to which the device belongs 7. authType:"abp"[The default is abp] 8. devAddr:8-byte hexadecimal string, required for abp join 9. appSKey:32-byte hexadecimal string, required for abp join 10. nwkSKey:32-byte hexadecimal string, required for abp join
The sample	<pre>{"action":"lorawanApi","method":"addMeter","param":{"appID":"3","devName":"DIPMeter03","devEUI":"8cf9572000010103","appEUI":"8cf9572000010103","region":"eu868","subnet":"ch_00-07","authType":"abp","devAddr":"00010203","appSKey":"2b7e151628aed2a6abf7158809cf4f3c","nwkSKey":"2b7e151628aed2a6abf7158809cf4f3c"}}</pre>
Response parameter	<ol style="list-style-type: none"> 1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: {"errcode":"0","errmsg":"success message"}

Traffic query

Query real-time traffic	
Request way	POST
Parameter(requestParams)	
requestParams	1.devEui:Unique number of the gas meter
The sample	<pre>{"action":"lorawanApi","method":"queryRealTimeData","param":{"devEui":"8cf9572000010105"}}</pre>
Response parameter	<ol style="list-style-type: none"> 1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2.If it is a water meter and gas meter,

	<pre> success:{"errcode":"0","errmsg":"Response message","data":{"devEui":"8cf9572000010105","readTime":"time of meter reading","cumulantFlow":"cumulative flow","positiveCumulantFlow":"forward cumulative flow","inverseCumulantFlow":"reverse cumulative flow","instantFlow":"instantaneous flow"}} 3.If it is an electricity meter , success:{"errcode":"0","errmsg":"Response message","data":{"devEui":"devEui","readTime":"time of meter reading","cumulantFlow":"Positive active total electrical energy ","positiveCumulantFlow":"Positive active total electrical energy ","inverseCumulantFlow":"-","instantFlow":"-"}} 4. If it is a liquefied gas tank meter, success: { "errcode": "0", "errmsg": "search successful!", "data": { "devEui": "8cf95720000107db", "readTime": "2020-06-12 14:36:35", "margin": "0.01%", //margin "leakageMark": "false" //Leak mark, false does not leak, true leaks } } </pre>
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Enquiry daily consumption	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEui:Unique number of the gas meter,All devEui that need to query daily usage 2. date:"yyyy-MM-dd",Date of query usage.If it is empty or the date is wrong, query today's usage
The sample	{"action":"lorawanApi","method":"queryAllDailyConsumption","param":{"devEui":"8cf9572000010105,8cf9572000010103","date":"2019-10-22"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2.success:{"errcode":"0","errmsg":"successmessage","data":{"devEui":"8cf9572000010105","readTime":"time of meter reading","consumption":"Usage information"}}

Query monthly usage	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEui:Unique number of the gas meter,All devEui that need to query daily

	usage 2. date:"yyyy-MM",Date of query usage.If it is empty, Query the usage of the current month
The sample	{"action":"lorawanApi","method":"queryAllMonthlyConsumption","param":{"devEui":"8cf9572000010105,8cf9572000010103","date":"2019-10"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2.success: {"errcode":"0","errmsg":"successmessage","data":"Usage information"}

The valve handle

Inquire valve status	
Request way	POST
Parameter(requestParams)	
requestParams	1.devEui:Unique number of the gas meter
The sample	{"action":"lorawanApi","method":"readValveStatus","param":{"devEui":"8cf9572000010105"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: {"errcode":"0","errmsg":"success message","data":"valveStatus"}

Top-up payment

top-up	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEui:Unique number of the gas meter 2. topUpAmount:Recharge amount
The sample	{"action":"lorawanApi","method":"remotelyTopUp","param":{"devEui":"8cf9572000010105","topUpAmount":"100"}}
Response parameter	1. failure: {"errcode":"-31/-1","errmsg":"failure message"} 2. success: {"errcode":"0","errmsg":"success message","valueId":"Can call api query instruction result"}

Query payment mode	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEuis:Deveui number(batch)
The sample	{"action":"lorawanApi","method":"getPaymod",

	"param":{"devEuis":["8cf9572000010105","8cf9572000010106"]}}
Response parameter	<ol style="list-style-type: none"> 1. devEui:Unique number of the gas meter 2. paymod:Payment mode (0: post-payment, 1: pre-payment,2:unknow) unknow:There is a problem with the table file 3. code:200 success;300 fail 4. msg:The execution result

Enquiry on payment order	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. devEuis:Deveui number(mandatory) 2. startDate:Start date (The default is nearly two days) 3. endDate:End date(The default is nearly two days) 4. pageNumber:The page number(The default is 1) 5. pageSize:Number of records per page(The default is 10)
The sample	{"action":"lorawanApi","method":"queryPayorders", "param":{"devEui":"88f9572020020103"}}
Response parameter	<ol style="list-style-type: none"> 2. devEui:Unique number of the gas meter 3. sn:The order number 4. fee:The order amount 5. state: Transaction status: <ul style="list-style-type: none"> 0: waiting for recharge, 1: in recharge, 2: recharge successfully, 3: recharge failed 6. tradingHours: Trading hours 4. code:200 success;300 fail 5. msg:The execution result

meter processing

Removal of gas meter	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. devEuis:Deveui number(batch)
The sample	{"action":"lorawanApi","method":"archivesChange", "param":{"type":"0","devEuis":["8cf9572000010105","8cf9572000010106"]}}
Response parameter	<ol style="list-style-type: none"> 1. devEui:Unique number of the gas meter 2. type: 0:Removal of gas meter 3. code:200 success;300 fail 4. msg:The execution result

Replacement of gas meter	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. devEuis:Deveui number(batch) 2. oldDeveui:The DEVEUI of the old 3. newDeveui: The new DEVEUI
The sample	<code>{"action":"lorawanApi","method":"archivesChange", "param":{"type":"1","oldDeveui":"8cf9572000010106","newDeveui":"8cf9572000010107"}}</code>
Response parameter	<ol style="list-style-type: none"> 1. oldDeveui:The original gas meter Deveui 2. newDeveui:New gas meter Deveui 3. type: 1:Replacement of gas meter 4. code:200 success;300 fail 5. msg:The execution result

Recovery gas meter	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEuis:Deveui number(batch)
The sample	<code>{"action":"lorawanApi","method":"archivesChange", "param":{"type":"2","devEuis":["8cf9572000010105","8cf9572000010106"]}}</code>
Response parameter	<ol style="list-style-type: none"> 1. devEui:Unique number of the gas meter 2. type: 2:Recovery gas meter 3. code:200 success;300 fail 4. msg:The execution result

Meter control API

Meter command control, down control command

Switch valve

Switch valve	
Request way	POST
Parameter(requestParams)	
requestParams	<ol style="list-style-type: none"> 1. devEui:Unique number of the gas meter 2. valveState: 0-means close valve 1-means open valve
The sample	<code>{"action":"lorawanMeterApi","method":"setValveState","param":{"devEui":"8cf9572000010105","valveState":"0/1"}}</code>

Response parameter	1. failure: errcode:-31/-1 errmsg:failure message 2. success: errcode:0 errmsg:success message valueId:Can call api query instruction result
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Command and control

Command and control	
Meter down control, issue the command to the meter execution	
Request way	POST
Parameter(requestParams)	
requestParams	1. devEui:Unique number of the gas meter 2. valveState: 0-means close valve 1-means open valve
The sample	<pre> {"action":"lorawanMeterApi","method":"sendCommand","param":{ "devEui":"8cf9572000010105","commandStr":"Obtain administrator","commandParams":{}}} </pre> from
Response parameter	1. failure: errcode:-31/-1 errmsg:failure message 2. success: errcode:0 errmsg:success message valueId:Can call api query instruction result