# local http IOT API

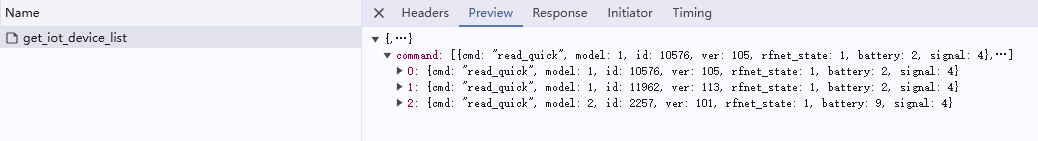
This is a Http compliance API for controlling Ecowitt’s IoT device in Json format.

***1.Aquire all connected IoT device list***  
URL:<http://192.168.4.1/get_iot_device_list> or [http://xx.xx.xx.xx/get\_iot\_device\_list](http://10.10.10.104/get_iot_device_list)

where xx.xx.xx.xx is device local ip address.

Generic curl format (AC1100 and WFC01 examples see end of document):  
curl -d ‘command-string’ -X POST http://IP-Address-or-Domain/parse\_quick\_cmd\_iot

HTTP\_GET : get\_iot\_device\_list:

Receive:

{

"command":[

{"cmd":"read\_quick","model":1,"id":10576,"ver":105,"rfnet\_state":1,"battery":2,"signal":4},

{"cmd":"read\_quick","model":1,"id":11962,"ver":113,"rfnet\_state":1,"battery":2,"signal":4},

{"cmd":"read\_quick","model":2,"id":2257,"ver":101,"rfnet\_state":1,"battery":9,"signal":4}

]

} // 3 IoT devices on the hub.

or

{ "command":[]} // if it is blank, then there is no device

Remark:

Read\_quick: command type

model : 1 for WFC01， 2 for AC1100。

id : sub device ID eg: id = 10576 = 0x2950

ver : sub device firmware version

rfnet\_state: 0 or 1 ; (hub to sub-device radio link) 0: currently offline， 1 : currently online

battery ：9: invalid; 0~5 battery level，when <=1 low battery

signal： 0: no signal， 0~4 signal strength indicator.

1. Turn On the Device

URL:[http://192.168.4.1/p](http://192.168.4.1/get_iot_device_list)arse\_quick\_cmd\_iot/ or [http://xx.xx.xx.xx/p](http://10.10.10.104/get_iot_device_list)arse\_quick\_cmd\_iot   
where xx.xx.xx.xx is device local ip address.

HTTP\_POST : parse\_quick\_cmd\_iot:

1）Turn On WFC01 (0x1113) ( after this command sent, read the device status once every two seconds to confirm the command execution status)

Send:

{"command":[{"cmd":"quick\_run",

"on\_type":0,"off\_type":0,"always\_on":1,"on\_time":0,"off\_time":0,"val\_type":0,"val":0,"id":4371,"model":1}]

}

Remark:

"cmd":"quick\_run", // command type

"on\_type":0, // fixed to 0

"off\_type":0, // fixed to 0

"always\_on":1, // always\_on (fixed to 1)

"on\_time":0, // fixed to 0

"off\_time":0, // fixed to 0

"val\_type":0, // fixed to 0

"val":0, // fixed to 0

"id":4371, //id = 4371 =0x1113

"model":1, // 1:WFC01， 2:AC1100。

2）Turn on AC1100 (0x8D1)

Send:

{"command":[{"cmd":"quick\_run",

"on\_type":0,"off\_type":0,"always\_on":1,"on\_time":0,"off\_time":0,"val\_type":0,"val":0,"id":2257,"model":2}]

}

"cmd":"quick\_run", // command type

"on\_type":0, // fixed to 0

"off\_type":0, // fixed to 0

"always\_on":1, // always\_on fixed to 1

"on\_time":0, // fixed to 0

"off\_time":0, // fixed to 0

"val\_type":0, // fixed to 0

"val":0, //fixed to 0

"id":2257, // id = 2257 = 0x8D1

"model":2 // model : 1 WFC01， 2 AC1100。

1. Turn off the device

URL: [http://192.168.4.1/p](http://192.168.4.1/get_iot_device_list)arse\_quick\_cmd\_iot/ or [http://xx.xx.xx.xx/p](http://10.10.10.104/get_iot_device_list)arse\_quick\_cmd\_iot

where xx.xx.xx.xx is device local ip address.

HTTP\_POST : parse\_quick\_cmd\_iot:

Turn Off WFC01 (0x1113):

Send:

{"command":[{"cmd":"quick\_stop","id":4371,"model":1}]}

Remark:

"cmd":"quick\_stop", //quick\_stop

"id":4371, // id = 4371 =0x1113

"model":1 // 1:WFC01， 2 :AC1100。

Turn Off the AC1100 (0x8D1)

Send:

{"command":[{"cmd":"quick\_stop","id":2257,"model":2}]}

Remark:

"cmd":"quick\_stop", //

"id":2257, // id = 2257 = 0x8D1

"model":2 // model 1:WFC01， 2: AC1100。

1. Acquire specified device information

URL:[http://192.168.4.1/p](http://192.168.4.1/get_iot_device_list)arse\_quick\_cmd\_iot/ or [http://xx.xx.xx.xx/p](http://10.10.10.104/get_iot_device_list)arse\_quick\_cmd\_iot   
where xx.xx.xx.xx is device local ip address.

HTTP\_POST : parse\_quick\_cmd\_iot:

1. Read ID 4371 WFC01 device information.

Send:

{"command":[{"cmd":"read\_device","id":4371,"model":1}]}

Receive:

{

"command":[{

"model":1,"id":4371,"nickname":"WFC01-00001113","devicename":"ijtACsNMWkIKzX8rf3yQ","version":103,"water\_status":0,"warning":16,"always\_on":1,"val\_type":1,"val":0,"run\_time":11115,"wfc01batt":0,"rssi":4,"gw\_rssi":-20,"timeutc":1715335047,"publish\_time":1715334144,"water\_action":4,"water\_running":0,"plan\_status":128,"water\_total":10,"happen\_water":10,"flow\_velocity":0}]

}

Remark：

“read\_device” // command type

"model":1, // device type 1: wfc01，2:AC1100

"id":4371, // device id = 4371 =0x1113

"nickname":"WFC01-00001113", // device name ( not changeable)

"devicename":"ijtACsNMWkIKzX8rf3yQ", // device name given on server ( not changeable)

"version":101, // version number

"water\_status":0, // valve state 0: off 1: on

"warning":16, // warning bit 0: leak; bit 1: no water;  bit 2: temp low; bit 3: temp high; bit 4: low battery; bit 7: offline;

"always\_on":1, // =1 always on in effective; =0 by volume or time. (current working mode)

"val\_type":1, // val unit: 0:seconds 1：minutes 2：hours 3: volume (L) valid when always\_on =0

"val":0,  // Quantiy ( valid when always\_on =0)

"run\_time":11115, // latest triggered operation running time ( seconds )

"rssi":4, // signal strength for the sub device

"gw\_rssi":-24, // signal strength of the hub

"timeutc":1715324614, // hub to/from sub device data update time stamp

"publish\_time":1715251415, // water\_action triggered time stamp .

"water\_action":35, // triggering action type ( refer to the definition listed below)

"water\_running":0, // program in progress 0: completed 1: in progress

"plan\_status":128, // unused

"water\_total":10, // history total volume ( reset to 0 after power up)

"happen\_water":0.000, // water volume when water program starts. (L = water\_total - happen\_water)

"flow\_velocity":0.00， // flow rate (L/min) at “timeutc”

"water\_temp":"76.1" // water temperature (F) at “timeutc”

Send:

{"command":[{"cmd":"read\_device","id":11962,"model":1}]}

Receive:

{

"command":[{

"model":1,"id":11962,"nickname":"WFC01-00002eba","devicename":"lseK9WNPprBabxLkv0CQ","version":113,"water\_status":0,"warning":144,"always\_on":0,"val\_type":0,"val":0,"run\_time":0,"wfc01batt":0,"rssi":4,"gw\_rssi":0,"timeutc":0,"publish\_time":1,"water\_action":35,"water\_running":0,"plan\_status":128,"water\_total":"0.000","happen\_water":"0.000","flow\_velocity":"0.00"}]

}

1. Aquire AC1100 device info with ID x8D1(2257)

Send:

{"command":[{"cmd":"read\_device","id":2257,"model":2}]}

Receive:

{

"command":[{

"model":2,"id":2257,"nickname":"AC1100-000008d1","devicename":"I3WN9g6Ki7DCH0tzcZRq","version":101,"ac\_status":0,"warning":0,"always\_on":0,"val\_type":1,"val":10,"run\_time":600,"rssi":4,"gw\_rssi":-42,"timeutc":1715652373,"publish\_time":1715597775,"ac\_action":35,"ac\_running":0,"plan\_status":0,"elect\_total":25,"happen\_elect":0,"realtime\_power":0,"ac\_voltage":224,"ac\_current":0}]

}

Remark：

"model":2, // devcie type 1: wfc01，2:AC1100

"id":2257, // devcie id = 2257 = 0x8D1

"nickname":"AC1100-000008d1", // IOT device name

"devicename":"I3WN9g6Ki7DCH0tzcZRq", // IoT device name on the server

"version":101, // version

"ac\_status":0, // relay state 0: off 1: on

"warning":0, // warning bit 0: leak current detected on off state; bit 1: no load current detected when it is on (not in use now);  bit 2: low current (not in use now); bit 3: over load ; bit 4: relay abnormal;  bit 7: not connected on radio;

"always\_on":0, // =1 always on in effective; =0 by time. (current working mode)

"val\_type":1, // run\_time unit 0:seconds 1：minutes (valid when always\_on =0)

"val":10, // QTY (valid when always\_on =0)

"run\_time":600, // latest triggered operation running time ( seconds )

"rssi":4, // sub device signal strength detected by the gateway.

"gw\_rssi":-42, // sub device reported gateway signal strength.

"timeutc":1715652373, // hub to/from sub device data update time stamp

"publish\_time":1715597775, // ac\_action triggered time stamp

"ac\_action":35, // triggering action type, refer to the remarks for details.

"ac\_running":0, // program in progress 0: completed 1: in progress

"plan\_status":0, // unused

"elect\_total":25, // history total w.h ( reset to 0 after power up)

"happen\_elect":0, // w.h reading when program starts. (w.h = elect\_total - happen\_elect)

"realtime\_power":0, // power meter reading when time is “timeutc”

"ac\_voltage":224, // power voltage at “timeutc”

"ac\_current":0 // power current at “timeutc”

ACTION Triggering Source:

0=>'IDEL RUN' // reset state

1=>'BUTTON RUN' //button triggered run

2=>'BUTTON STOP' //button triggered stop

3=>'QUICK RUN' // Quick Run triggered by “ecowitt” APP

4=>'QUICK STOP' // Quick Run stop triggered by “ecowitt” APP

5=>'SMART RUN' // Smart triggered Run

6=>'SMART STOP' //Smart triggered Stop

7=>'PLAN RUN' // Plan triggered Run

// gateway triggered local operation

35=>'LOCAL RUN' // local WLAN triggered Run

36=>'LOCAL STOP' // local WLAN triggered Stop

curl call/request examples:

power on AC1100:

AC1100-1

on:

curl -d '{"command":[{"on\_type":0,"off\_type":0,"always\_on":1,"on\_time":0,"off\_time":0,"val\_type":1,"val":0,"cmd":"quick\_run","id":10454,"model":2}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

off:

curl -d '{"command":[{"cmd":"quick\_stop","id":10454,"model":2}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

Status:

curl -d '{"command":[{"cmd":"read\_device","id":10454,"model":2}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

WFC01-Status:

curl -d '{"command":[{"cmd":"read\_device","id":10534,"model":1}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

start valve infinite:

curl -d '{"command":[{"on\_type":0,"off\_type":0,"always\_on":1,"on\_time":0,"off\_time":0,"val\_type":0,"val":0,"cmd":"quick\_run","id":10534,"model":1}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

start valve for 1 minute:

curl -d '{"command":[{"on\_type":0,"off\_type":0,"always\_on":0,"on\_time":0,"off\_time":0,"val\_type":1,"val":1,"cmd":"quick\_run","id":10534,"model":1}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot

off:

curl -d '{"command":[{"cmd":"quick\_stop","id":10534,"model":1}]}' -X POST http://IP-address-or-domain/parse\_quick\_cmd\_iot