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AT commands

(Ebyte ZigBee 3.0 module)

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1 AT commands and basic format

1.1 Introduction to Ebyte ZigBee 3.0 AT commands:

What are AT commands:

Ebyte AT commands are used for networking and control of ZigBee 3.0 devices. They are input and output in ASC code string format, which is convenient for users to develop quickly.

Advantages of using AT commands:

AT commands use ASC code strings for input and output, which is convenient for developers to remember each command and its purpose. At the same time, the output information of the ZigBee module during the running process is in the format of ASC code string, which is convenient for users to read the running status of the module.

Notes on using AT commands:

AT commands have the advantage of convenient development in small-scale networking, but ZigBee large-scale networking applications occupy high hardware resources due to string processing, low wireless transmission efficiency, and inability to distinguish different targets in a many-to-many communication environment. Therefore, it is recommended that in large-scale networking applications, the mode with HEX command should be switched (refer to the document "Ebyte ZigBee3.0 Module HEX Command Standard Specification").

1.2 Basic Format of Ebyte ZigBee 3.0 AT Command

Ebyte ZigBee 3.0 AT commands start with the string "AT + ", with uppercase string commands, such as "AT+EXIT". There are three types of commands: execute command, set command, and query command.

1.2.1 Execute commands:

The execution command ends directly with an uppercase string, which means to perform an operation without any parameters, such as "AT+EXIT".

1.2.2 Set command:

The setting command adds the "=" symbol after the last string, followed by the setting parameters, such as "AT+BAUD=115200".

1.2.3 query command:

The query command adds a "?" symbol after the last string without any parameters.

1.3 Switch between AT command mode and other modes:

1.3.1 Switch from other modes to AT mode

To switch to AT mode in transparent transmission mode:

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Use the command " locally set serial port data transmission related properties (local configuration command type, command code 0x11) ", set "port index=0", "attribute ID=0x0003", "parameter data=0x01", make the module enter the data transmission Transmission mode: Then input "+AT" three ASC code characters in data transparent transmission mode.

example:

Send: 55 07 00 11 00 03 00 01 13

Feedback: 55 04 00 11 00 11

Successfully enter the transparent transmission mode, send "+AT" in the transparent transmission mode, return " AT Mode" , enter transparent transmission mode

Note: Modules in transparent transmission mode and AT mode can read the attribute "transparent transmission mode" remotely (see "Ebyte ZigBee3.0 Module HEX Command Standard Specification" 4.4.7 "Ebyte Data Transmission Control Cluster" "), the values are all 0x01.

HEX command mode to switch to AT command mode:

Use the command "Enter AT command mode (local configuration command type, command code 0x16)"

example:

Send: 55 03 00 16 16

Feedback: 55 04 00 16 00 16

1.3.2 Switch from AT mode to other modes

Switch to HEX mode:

Use the AT command "AT+ EXIT " to enter the HEX command mode

example:

Send: "AT+ EXIT "

Feedback: "OK\r\n"

The module enters HEX command mode

Switch to transparent transmission mode:

Use AT command "AT+SEND" to enter transparent transmission mode

example:

Send: "AT+ SEND "

Feedback: " SEND MODE \r\n"

Mode enter data transparent transmission mode

1.3.3 Switch back to HEX command mode from transparent transmission mode

In the transparent transmission mode, send the "+++" string to the module to switch back to the HEX command mode.

1.4 List of AT commands

Order	Function	type
AT+EXIT	Exit to HEX command mode	implement

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AT+JOIN	Network or create a new network	implement
AT+STOP	stop networking	implement
AT+RESET	Module reset	implement
AT+LEAVE	Exit the current network	implement
AT+SEND	Enter transparent transmission mode	implement
AT +FIND	automatic search target	implement
AT+INFO	Read device information	Inquire
AT+DEVTYPE	Set or read device class	set/query
AT+BADU	Set or read baud rate	set/query
AT+DSTADDR	Set or read target short address	set/query
AT+DSTEP	Set or read target port	set/query
AT+LPLEVEL	Set or read low power level	set/query
AT+TURNON	switch on	implement
AT+TURNOFF	open switch	implement
AT+TOGGLE	Invert switch	implement
AT+LEVELUP	Level increased	implement
AT+LEVELDOWN	Reduced level	implement
AT+LEVELSET	set level	set up

2 AT command function and its explanation

Note - big and small endian mode in AT commands :

Regarding the big-endian mode in the AT command, all data in hexadecimal format, including short addresses and MAC addresses, all start with 0x are in big-endian mode; if it does not start with 0x, and there is a "." in the middle. On, all are small segment mode.

MAC address: 8-byte big-endian mode starting with 0x

PANID: 2-byte big-endian mode starting with 0x

Short address: 2-byte big-endian mode starting with 0x

Virtual SN: 9-byte little-endian mode enclosed by "[]", and each byte is separated by ".". (For the introduction of virtual SN, see the description of "Virtual Device SN Number" in "Ebyte ZigBee3.0 Module HEX Command Standard Specification")

2.1 Exit to HEX command mode (AT+EXIT)

Function:

Exit from AT command mode to HEX command mode

Input: " AT+EXIT "

Return: "OK\r\n"

Effect:

After executing this command and returning "OK", the module will continue to output the

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system notification command "device startup (command code 0x00)" (see "Ebyte ZigBee3.0 Module HEX Command Standard Specification"), indicating that the module has been The AT command mode switches back to the HEX command mode.

2.2 Start network configuration (AT+JOIN)

Function:

Nodes that are not connected to the network create a new network when they are configured as coordinators. When they are configured as routers or terminal nodes, they look for an open coordinator and join it. If the coordinator of the created network executes this command, the device will be allowed to enter the network within 180 seconds for other devices to join in. The routers and terminal nodes that have already entered the network will execute this command without any response.

Input: " AT+ JOIN"
Return: "OK\r\n"

Effect:

Execute this command in a coordinator environment with an open network. After a few seconds, the module outputs "NET:JOIN\r\n", or " NET:IDLE \r\n" if the network connection fails. When the coordinator executes this command, it outputs " NETOPEN:180-Sec \r\n " and starts the network opening countdown for 180 seconds.

2.3 Stop network configuration (AT+STOP)

Function:

The coordinator stops the network configuration. If the coordinator does not need to add new nodes after the coordinator starts to configure the network, use this command to stop the coordinator from adding new devices. Even if routers and terminal nodes that are not connected to the network are triggered to join the network, they cannot join the coordinator. However, if there are other coordinators in the space that allow access to the network, routers and terminal nodes that are not connected to the network can join other coordinators.

Input: "AT+STOP"
Return: "OK\r\n"

Effect:

Execute this command, the module outputs "NETCLOSE\r\n"

2.4 Module reset (AT+RESET)

Function:

Module reset

Enter: "AT+RESET"
Return: "OK\r\n"

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Effect:

module resets and outputs " BOOT=0\r\n" and "VERSION=0\r\n" .

2.5 Leave the network (AT +LEAVE)

Function:

The mod leaves the current network

Enter: "AT+LEAVE"
Returns: "OK\r\n"

Effect:

When the module exits the current network, the coordinator will receive the node's leave message and delete the network entry record. The module will output "BOOT=0\r\n" and "VERSION=0\r\n" to indicate that it has been rebooted.

2.6 Enter transparent transmission mode (AT+SEND)

Function:

Enter transparent transmission mode

Input: "AT+SEND"
Returns: " SEND MODE \r\n "

Effect:

The module enters the transparent transmission mode. Any data entered in the transparent transmission mode will be sent to the target device corresponding to the target address.

2.7 Automatic search target (AT+FIND)

Function:

Automatically search for the other party's transparent transmission module, in addition to searching for other data transmission modules, you can also search for ZigBee 3.0 lighting equipment.

Input: "AT+FIND"
Returns: " OK\r\n "

Effect:

Two data transmission modules can execute this command at the same time, or press the network key. After finding the target, it will output " FIND:ADDR= 0x%04x EP= %d cluster= 0x%04x \r\n" . If the target cannot be found, it will return "FIND:MISS\r\n " . According to the EP value and the cluster value, you can determine what the found target is. cluster=0xFC08 is the transparent transmission module, cluster=0x0006 is the switch and lighting equipment, cluster=0x0008 is the dimmable light (including the PWM output on the module).

2.8 Read device information (AT+INFO)

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Function:

This command only supports query, ie ending with "?" . Read the current network information of the device, including channel, PANID, device type, MAC address and other information.

Input: "AT+INFO?"
Return: networking information

Effect: Return when not networked
"NO NET\r\n"
"TYPE=Router\r\n"
"MAC= 0xHHHHHHHHHHHHHHHH \r\n"

Networked and returned:
"TYPE=SleepyEndDevice\r\n" //(Coordinate \Router\EndDevice)
"MAC= 0xHHHHHHHHHHHHHHHH \r\n"
"PANID= 0xHHHH \r\n"
"CHANNEL=%d\r\n"
"ADDR= 0x HHHH\r\n"

2.9 Set or read device type (AT+DEVTYPE)

Function:

The setting device is coordinator, router, terminal node or dormant terminal 4 types, or query the current setting type. After setting the device type, you need to reset the module to take effect. Perform network operations after setup to create or join a network. Setting type needs to be useful before screening.

set up
Enter: "AT+DEVTYPE =%d "
Returns: "OK\r\n" or "FAIL\r\n"

Inquire
Type: "AT+DEVTYPE?"
Returns: "DEVTYPE= COORDINATOR\r\n " or
"DEVTYPE= ROUTER\r\n " or
" DEVTYPE= END_DEVICE\r\n " or
"DEVTYPE=SLEEPY_END_DEVICE\r\n"

2.10 Set or read baud rate (AT+BAUD)

Function:

When used to set the baud rate of the module, it needs to be restarted to take effect. It can also be used to read the current baud rate and directly return the currently set baud rate.

Set the baud rate:

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Enter: "AT+BAUD=%d"
Return: "OK\r\n"

Read baud rate:
Input: "AT+BAUD?"
Returns: " BAUD= %d \r\n "

2.11 Set or read target address (AT +DSTADDR)

Function:

Used to set the target short address for transparent data transmission or read the current target address. When the target address is set to 0xFFFE, it is the MAC address binding target sending mode (you can bind the transparent transmission target through "AT+FIND") to prevent the short address of the target node from jumping due to the large amount of network data. When the destination port is 0, the destination short address is the multicast address.

Set the destination address:
Input: "AT+DSTADDR=%04x"
Returns: "OK\r\n"

read target address
Enter: "AT+DSTADDR?"
Returns: " DSTADDR= %04x\r\n"

2.12 Set or read the target port (AT+DSTEP)

Function:

Used to set or read the transparent transmission destination port. The target port is usually set to 1, which is the transparent transmission port of the other device. If it is set to 0, it is in multicast mode, and the target short address is the multicast address.

Set the destination port:
Input: "AT+DSTEP =%d"
Returns: "OK\r\n"

read target port
Input: "AT+DST EP ?"
Returns: " DSTADDR= %04x\r\n"

2.13 Set or read the current low power consumption level (AT+LPLEVEL)

Function:

It is used to set or read the low power consumption level of the module. The low power consumption level is only valid in the sleep terminal mode. There are a total of 4 low-power gears, which are wake up in 1 second, wake up in 3.3 seconds, wake up in 5 seconds, and sleep permanently.

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To set the low power level:
Input: "AT+LPLEVEL=%d"
Returns: "OK\r\n" or "FAIL\r\n"

Read the low power level:
Input: "AT+LPLEVEL ? "
Returns: " LPLEVEL=%d\r\n "

2.14 Turn on the switch (AT+TURNON)

Function:

To turn on the switch remotely, it can control the switch, plug-in, lamps and other equipment. The module needs to bind the target switch first. After binding the target switch, you can query the list of bound switches.

Display the list of switches:

- Input: "AT+TURNON?"
- Return: "(%d)ONOFF: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n" "OK\r\n"
- Effect: Display the list of switches bound to the module. The device format displayed in the list is displayed in the form of "virtual SN" of port + MAC address.

Turn on:

- Input: "AT+TURNON=%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The single light specified in the list is turned on

Turn on all switches:

- Input: "AT+TURNON"
- Returns: "OK\r\n"
- Effect: Turn on all switches in the list, and the broadcast will be turned on when the list is empty.

2.15 Turn off the switch (AT+TURNOFF)

Function:

To turn off the switch remotely, it can control the switch, plug-in, lamps and other equipment. The module needs to bind the target switch first. After binding the target switch, you can query the list of bound switches.

Display the list of switches:

- Input: "AT+TURNOFF?"

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- Return: "(%d)ONOFF: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Display the list of switches bound by the module, and the virtual SN of the target device is displayed in the list.

Turn off the switch:

- Input: "AT+TURNOFF=%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The specified switch in the list is turned off

Turn off the full switch:

- Input: "AT+TURNOFF"
- Returns: "OK\r\n"
- Effect: Turn off all switches in the list, and the broadcast will be turned off when the list is empty.

2.16 Invert switch (AT+TOGGLE)

Function:

Remote switch lights, can control lamps, switch equipment, you need to bind the target first.

Display the list of switches:

- Type: "AT+TOGGLE?"
- Return: "(%d)ONOFF: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Display the list of switches bound by the module, and the virtual SN of the target device is displayed in the list.

Invert switch:

- Input: "AT+TOGGLE=%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The specified switch in the list is inverted

Invert all switches

- Enter: "AT+TOGGLE"
- Returns: "OK\r\n"
- Effect: Invert all switches in the list, broadcast the inversion switch when the list is empty.

2.17 Level up (AT+LEVELUP)

Function:

Control the output level of the target light to become brighter, including the increase of the PWM output on the module.

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Display the list of fixtures:

- Enter: "AT+ LEVELUP?"
- Return: "(%d)LEVEL: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Display the list of fixtures bound by the module, and the virtual SN of the target device is displayed in the list.

Level up:

- Input: "AT+ LEVELUP =%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The level of the specified lamps in the list is increased by 10%

Increase all lights level

- Enter: "AT+ LEVELUP "
- Returns: "OK\r\n"
- Effect: The level of all lamps in the list increases by 10%, and the broadcast increases by 10% when the list is empty.

2.18 Level down (AT+LEVELDOWN)

Function:

Control the output level of the target light to dim, including the PWM output on the module to become smaller.

Display the list of fixtures:

- Enter: "AT+ LEVELUP?"
- Return: "(%d)LEVEL: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Display the list of fixtures bound by the module, and the virtual SN of the target device is displayed in the list.

Level down:

- Input: "AT+ LEVELUP =%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The level of the specified lamps in the list is reduced by 10%

All lights level down

- Input: "AT+ LEVELUP "
- Returns: "OK\r\n"
- Effect: The level of all lamps in the list is reduced by 10%, and the broadcast level is

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increased by 10% when the list is empty.

2.19 Set the level (AT+LEVELSET)

Function:

Set a level for the target fixture, which ranges from 0 to 256, corresponding to 0% to 100% output.

Display the list of fixtures:

- Input: "AT+ LEVEL SET ?"
- Return: "(%d)LEVEL: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Display the list of fixtures bound by the module, and the virtual SN of the target device is displayed in the list.

Set the level:

- Input: "AT+ LEVEL SET =%d ,%d " (the first %d is the set level percentage, the second %d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The level of the specified lamps in the list is adjusted to the specified value

Set all light level

- Input: "AT+ LEVEL SET =%d" (%d is the percentage of set level)
- Returns: "OK\r\n"
- Effect: All the fixtures in the list are brightened to the specified value, and the level is broadcast when the list is empty.

2.20 Mark the target (AT+IDENTIFY)

Function:

View all targets bound by the module, including data transparent transmission, switches, and lamps. According to the virtual SN number in the binding list, find the data transmission modules, switches and lamps corresponding to the real environment.

Display a list of bound devices:

- Enter: "AT+IDENTIFY?"
- Return: "(%d) ONOFF : SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "(%d)LEVEL: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "(%d) TRANS : SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Displays all target devices bound by the module, supports switch level, and data transparent transmission, and displays the virtual SN of the target device in the list.

Tag equipment:

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- Input: "AT+ IDENTIFY =%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The specified device in the list enters the marked state, the indicator light on the target device flashes, and the location of the device corresponding to the SN in the list can be found through the indicator light.

2.21 Unbind (AT+UNBIND)

Function:

View the transparent transmission target or controlled fixtures bound to the AT command port, and choose whether to delete any of them.

Display a list of bound devices:

- Type: "AT+ UNBIND?"
- Return: "(%d) ONOFF : SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "(%d)LEVEL: SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "(%d) TRANS : SN=[%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X.%02X]\r\n"
  "OK\r\n"
- Effect: Displays all target devices bound by the module, supports switch, level, and data transparent transmission, and displays the virtual SN of the target device in the list.

Delete target:

- Input: "AT+ UNBIND =%d" (%d is the serial number corresponding to the display switch list)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: Delete the bound target device. If the bound device table is displayed, you will find that the corresponding device has been deleted.

2.22 Set PWM output (AT+PWMOUT)

Function:

Set the PWM output duty cycle. Do not use this function when the E180ZG120 is configured as a sleep terminal.

To set the PWM duty cycle:

- Input: "AT+PWMOUT=%d,%d" (the first is the PWM number, the second is the duty cycle of 1/255 base)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The PWM duty cycle of the corresponding PWM channel output on the module changes

2.23 PWM marker mode (AT +PWMIDENT)

Function:

PWM channel enters the Identify mode, the PWM channel 1 second is the cycle jump, and

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the output flickering effect.

- Input: "AT+PWMIDENT=%d,%d" (the first is the PWM number, the second is the duration)
- Returns: "OK\r\n" or "FAIL\r\n".
- Effect: The corresponding PWM on the module flickers and jumps with a cycle of 1 second

2.24 Passthrough MODE type (AT+MODE)

Function:

Query or switch the current passthrough mode type. Mode 1 is passthrough with OK return, mode 2 is passthrough without OK return (supported by E180-ZG120 series V1.2 firmware and E18 series V1.4 firmware), and mode 3 is passthrough without any return (supported by all ZigBee Dtus). Mode 4 is modbus host mode (supported by E180-DTU).

View the current passthrough mode type:

- Input: "AT + MODE?"
- Returning: "MODE = % d" (% d type for the current passthrough MODE)
- Effect: the current passthrough mode type, if there's any return information affect the passthrough mode.

Change the current passthrough mode type:

- Input: "AT + MODE = % d" (% d to switch the passthrough MODE type)
- Returning: "OK \ r \ n".
- Effect: passthrough mode change, need to use "AT + SEND again into passthrough mode" to check the effect

2.25 Modbus ID (AT+MBID) Only DTU supports this command

Function:

Set or view the current Modbus ID of the DTU, which defaults to 255. If the DTU is required to work in Modbus slave mode, set the value to Modbus address value other than 255, then the slave DTU binds to the host DTU, and the host sets the serial port mode to 4. The first byte transmitted by the host is the Modbus ID of the slave, and the master will send data frames to the slave by means of vOD. Thus, the communication efficiency is improved.

Check the current Modbus ID:

- Input: "AT+MBID?"
- Return: "ModbusID=%d"(%d is the current ModbusID)
- Effect: Modbus ID currently set, 255 is invalid Modbus ID

Set the current Modbus ID:

- Input: "AT+MBID=%d" (Modbus ID set by %d, 0~254 is valid Modbus ID, if you do not want to use Modbus slave mode, set 255, it is recommended to set Modbus slave serial port mode to 3)
- Returns: "OK\r\n".
- Effect: Set Modbus ID. If the Modbus host is bound, the Modbus host can receive the periodic report of Modbus ID from the slave.

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2.26 View the connected Modbus ID slave (AT+MBLST) Only DTU supports this command

Features:

Check the slave list connected to the Modbus host. After the Modbus slave is bound to the Modbus host, the Modbus slave list of the host can be refreshes every 5 minutes. The host sends pass-through data in Modbus mode, and the first byte is the Modbus address. The master will look for the ZigBee network address of the slave according to the Modbus address, and obtain the optimal transmission efficiency by vOD transmission.

For a list of Modbus slaves:

- Input: "AT+MBLST?"
- Return: "MBID[n]:%04x-%d:MODBUS_ID=%d"(n is the list sequence number range 0-79, the first %04x is the slave ZigBee short address, the first %d is the slave ZigBee port, the second %d is the slave Modbus ID). When the list is finished printing, print "OK\r\n"
- Effect: output Modbus slave machine list, a total of 80 groups

3 Asynchronous print command parsing

The asynchronous print command is the command output by the module, and prints information according to the current state of the module.

3.1 Network status print information (NET:)

Command : NET:IDLE\r\n
Analysis: No network status

Command: NET:JOIN\r\n
Resolution: Join the network or restore the network

Command: NET:OPEN\r\n
Analysis: network open state

Command NET:OFF\r\n
Resolution: Broken link

3.2 Nodes join the network (JOIN:)

Command: JOIN:MAC=0x HHHHHHHHHHHHHHHH \r\n
Resolution: The node joins the network, the coordinator prints the node's MAC address, this command is only supported by the coordinator

3.3 Node address notification (NODE:)

Command: NODE:MAC=0x HHHHHHHHHHHHHHHH , ADDR=0x HHHH \r\n
Resolution: The coordinator or router receives the node's network access or restart or short address conflict, and prints the node's MAC address and the corresponding short address

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3.4 Node leave notification (LEAVE:)

Command: LEAVE:MAC=0x HHHHHHHHHHHHHHHH \r\n

Resolution: The coordinator will receive this message if the node is actively disconnected from the network or kicked off.

3.5 Remote device status reporting and printing information

Command: RPT:0xHHHH-%d LPLEVEL=%d \r\n

Analysis: Receive the heartbeat packet of the power consumption level of other nodes, the format is "short address - port number LPLEVEL = power consumption level value"

Command: RPT:0xHHHH-%d ONOFF=%d \r\n

Analysis: Receive the heartbeat packet of the switch status of other nodes, the format is "short address - port number ONOFF = switch status"

Command: RPT:0xHHHH-%d LEVEL=%d \r\n

Analysis: Received PWM level heartbeat packets from other nodes, the format is "short address - port number LEVEL = level value"

3.6 Device control status return information

Command: RSP:0xHHHH-%d IDENT:SUCCESS (or ERROR) \r\n

Analysis: When sending a marked target to a single node, the other party receives the message, and if it can mark it, it will reply SUCCESS, and if it cannot be marked, it will reply ERROR

Command: RSP:0xHHHH-%d ONOFF:SUCCESS (or ERROR) \r\n

Analysis: When sending switch control to a single node, the other party receives the message, and if it can control the switch, it will reply SUCCESS, and if it cannot control the switch, it will reply ERROR

Command: RSP:0xHHHH-%d LEVEL :SUCCESS (or ERROR) \r\n

Analysis: When sending level control to a single node, the other party receives the message, and if the level can be adjusted, it will reply SUCCESS, and if the level cannot be adjusted, it will reply ERROR

3.7 Modbus slave connection information

Command:MBID[n]:%04x-%d:MODBUS_ID=%d

Analysis: After a Modbus slave binds a Modbus host, the host receives the ModbusID of the slave and saves it in the ModbusID list of the host. The host receiving this message indicates that the slave is connected to the host, and the host can send commands to the slave DTU with the Modbus ID.

4 Revision history

Version	revision date	Revision Notes	Maintenance man
1.0	2022-11-02	first edition	Bin

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1.1	2022-11-16	Error correction	Bin
1.2	2023-02-02	Error correction	Bin
1.3	2023-02-15	New instruction	Bin
1.4	2023-04-03	New instruction	Bin

5 About us



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