



# **Modbus Gateway(Mini) Communication Protocol V2.0**

**GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI**

**Thank you for choosing Gree Modbus Gateway(Mini). To correctly use the Modbus Gateway(Mini) for building monitor integration, please read the protocol carefully before operation and keep it well for future reference.**

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# Preface

The protocol stipulates the communication format and data format of multi VRF system and fresh air unit series (CAN communication) model Modbus in communication.

This protocol is applicable to Multi VRF(CAN) Series,including GMV5,GMV5 C,GMV5 E,GMV5 HR,GMV5 MAX,GMV5 MINI,GMV5 SLIM,GMV WATER,Energy-recovery ventilation.

✚ Before developing the BMS software, please pay attention to the following 3 points:

1. Make sure you have read Chapter 6 Precautions before the use of Modbus gateway.
2. Make sure you have read 5.2: Precautions before the development of BMS interface.
3. Please contact Gree to confirm the compatability with BMS system.

✚ Notice:

The product specification is subject to change without notice.

## I. Terms and definitions

### 1.1 Modbus communication

Modbus is a kind of industrial communication protocol for distributed control system. Modbus network is a master-slave network which allows the communication between one master unit and one or multiple slave units to realize data interchange. The Modbus communication is realized in a request-response way, that is, each request sent by the master unit is corresponding to a response replied by a slave unit.

### 1.2 ASCII mode

Under this mode, as for the communication via Modbus, 8 bits in one piece of information can be transmitted as 2 ASCII characters.

### 1.3 RTU mode

Under this mode, 8 bits can be divided into 2 4-bit hexadecimal characters. The advantage of RTU mode is that, with the same baud rate the transmitted character density is higher than that in ASCII mode. Each piece of information must be transmitted continuously.

### 1.4 Master unit

It indicates the device which sends the Modbus request, such as a PC.

### 1.5 Slave unit

It indicates the device which provides Modbus communication interface and is capable of responding to the request sent by the master unit, for example, a Modbus gateway. For the convenience of explanation, Modbus gateway is taken as an example in this protocol.

### 1.6 Coil

It is expressed by 1 bit, such as the switch bit, failure bit, etc. The coil is a universal expression of Modbus protocol. It is actually a 1-bit data value, i.e. Boolean, switching value.

### 1.7 Register

It is expressed by 2 bytes (16 bits), such as temperature, mode, etc. The register is a universal expression of Modbus protocol. It is actually a word (16 bits), an analog value.

## 1.8 Device address

It indicates the address of Modbus gateway, through which the master unit can identify the Modbus gateway in the network. Address range: 1~255. Address 0 is the address of broadcast (received by all Modbus gateways).

## 1.9 Broadcast

When the master unit sends out a control frame (control frame only), all slave units in the network can receive it and then perform the control action (without reply). The device address for broadcast frame is 0.

## 1.10 Function code

Function code is used to identify the function of communication frame. See the following table for the function codes covered in this protocol.

Table 1 Function code

Description	Function code
Read coil (read Bit)	0x01
Read register (read Word)	0x03
Write coil (write Bit)	0x0f
Write register (write Word)	0x10

## 1.11 Starting address

It indicates the starting address of the register (coil: bit address; register: word address). The data translation starts from the high-order 8 bits to the low-order 8 bits.

## 1.12 Data size

It indicates the counting number of to-be-operated data starting from the starting address (coil: bit count; register: word count). The data translation starts from the high-order 8 bits to the low-order 8 bits.

## 1.13 Byte count

It indicates the count number of effective bytes during data transmission.

## 1.14 Effective data

It indicates the control data, status data, etc.

## 1.15 Error code

It indicates the error type which is detected and fed back by Modbus gateway when the master unit sends a request frame.

## 1.16 CRC

It indicates the cyclic redundancy code consisting of two bytes. The data translation starts from the low-order 8 bits to the high-order 8 bits. See Annex A for more details about calculation.

## 1.17 Request frame

It is the request sent by the master unit to Modbus gateway.

## 1.18 Response frame

It is the response replied by Modbus gateway to the request frame sent by the master unit.

## 1.19 Communication frame

It is the collection of continuously transmitted bytes during the communication.

### 1.20 BMS

Building Management System.

## II. Brief introduction of BMS

The interface RS485 of Modbus RTU Communication Protocol, provided by the long-distance monitoring system, can be directly connected with the Building Management System to realize control over the units and display of their running status.

## III. Network topology

### 3.1. General

See Fig.1 for the network topology. The whole monitoring system consists of two parts: network of the units and the monitoring network (Modbus), which are connected to each other through Modbus gateway, so that communication data of the two networks can be exchanged.

### 3.2. Topological structure

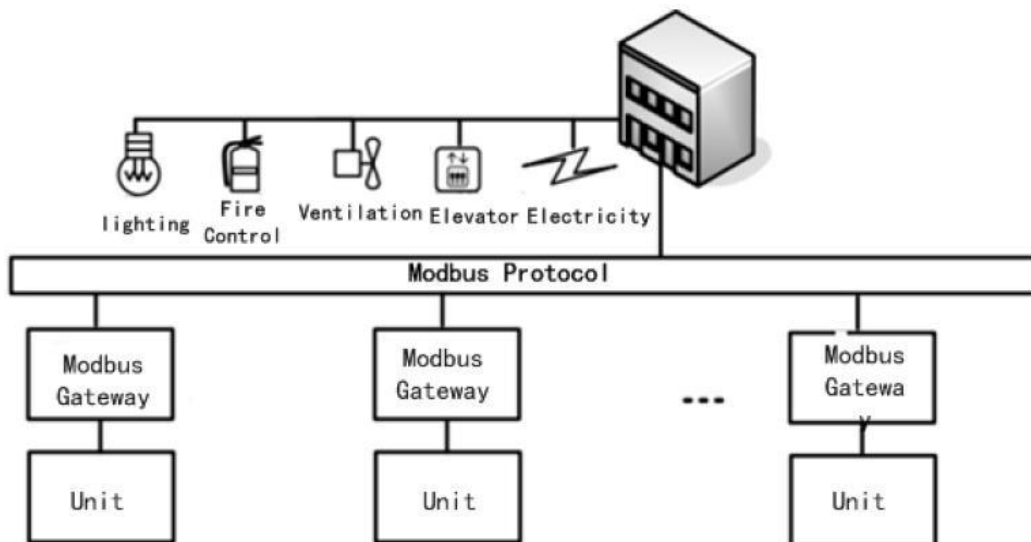


Fig 1 Topological structure

Remark:

The device address of each Modbus gateway on one set of Modbus can't be repeated, otherwise, communication failure will occur! The range of device address for Modbus gateway: 1~255.

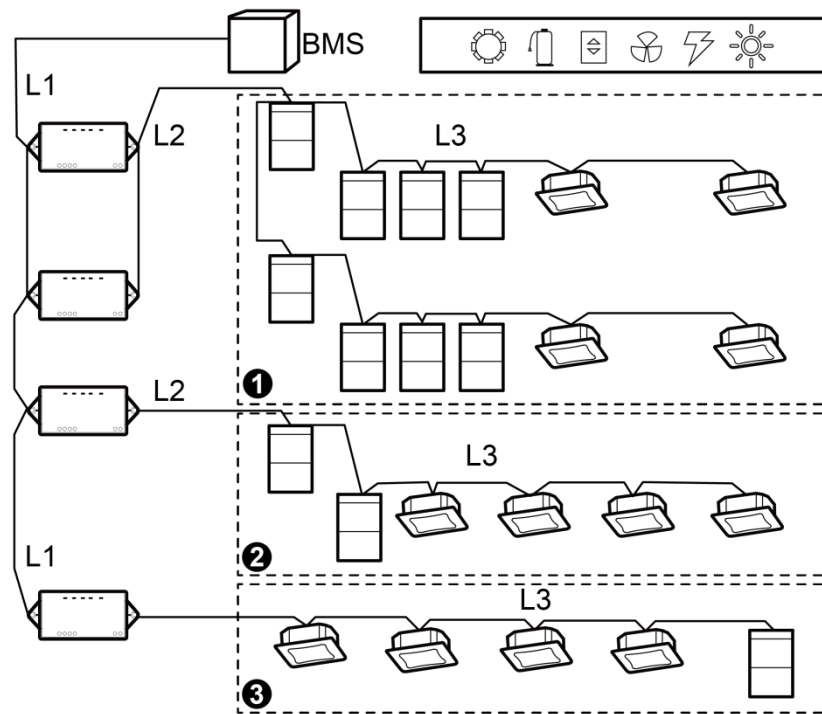


Fig2: Concrete network

Network description:

The fig shows the general integration condition about fresh air unit and multi VRF system into the same topology network. Its IDU can be either multi VRF system or fresh air unit.

Bus: L1 is the bus of Modbus.

When connecting fresh air unit, set one of the IDUs of fresh air unit as the simulative ODU. The fresh air unit can be connected individually to form CAN1 network or connected with the multi VRF system to form the topology network.

CAN1 network: ③ is the CAN1 network, consisting of Modbus Gateway(Mini) and all ODUs and IDUs of the system. One CAN1 network can be connected with 80 IDUs at most; the L3 bus is the bus of CAN1.

CAN2 network: ①② is the CAN2 network, consisting of Modbus Gateway(Mini) and main control ODU of the system. One CAN2 network can be connected 16 sets of ODUs and 255 IDUs at most. If there are more than 16 sets of ODUs or more than 255 IDUs, the network should be split into two networks.

System: a system is consisting of a set of ODU (a set of ODU is a module, consisting of 1-4 modules, namely 1-4 OUDs) and its accessory IDUs.

Quantity of units connectable to Modbus Gateway(Mini): one Modbus Gateway(Mini) can be connected to 16 sets of ODUs and 128 IDUs and 2 Modbus gateways are needed if the number of IDUs exceed 128.

### 3.3. Fresh air unit

If the fresh air unit is not integrated with the multi VRF system but forms the topology network individually, there will be two topology models according to different fresh air unit series.

Fresh air unit of all series can match with ODU.

Integration of Energy-recovery ventilation shall be connected to the ODU.

#### 3.3.1. Communication model 1

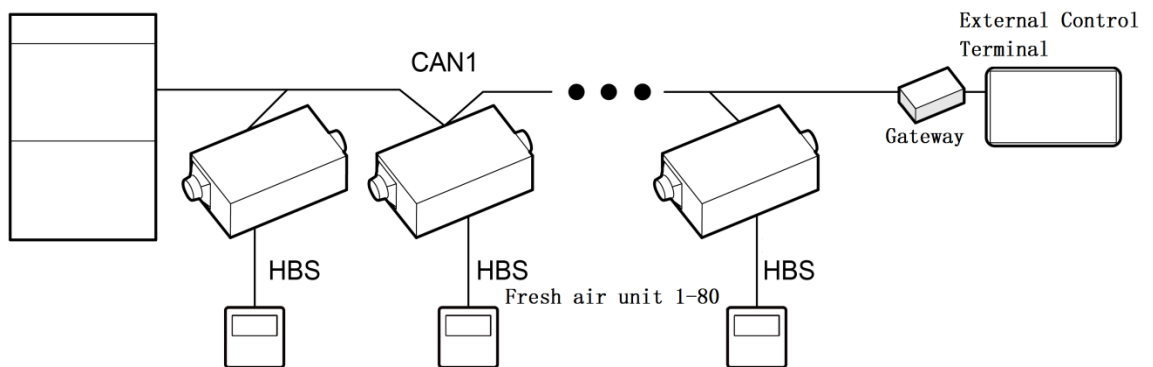


Fig 3: Model 1

Fresh air unit integration shall match with ODU, connect them to the gateway through ODU; it's not necessary to connect to the wired controller.

#### 3.3.2. Communication model 2

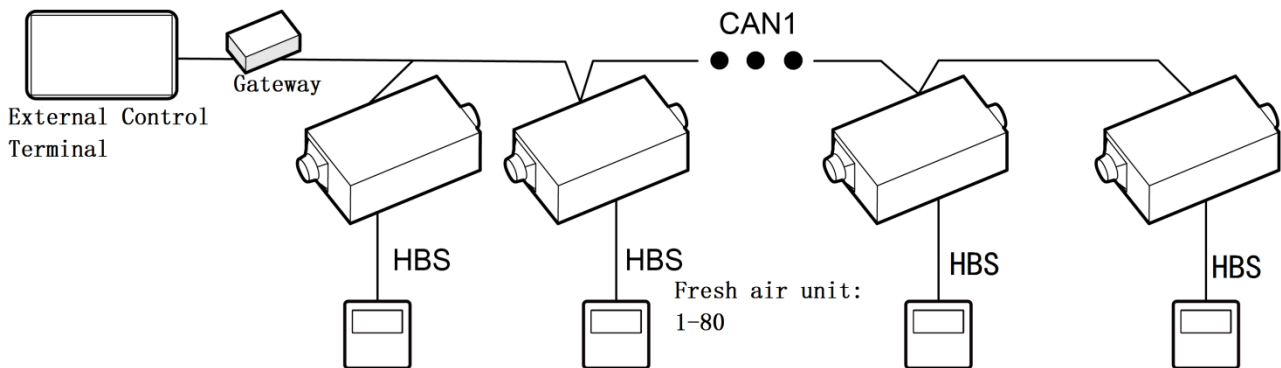


Fig 4: Model 2

It's not necessary for the fresh air unit integration to connect to ODU but please set a fresh air unit as the simulative ODU; it's not necessary to connect to the wired controller.

## IV. MODBUS protocol format

### 4.1. General

Modbus has actually become an industrial communication standard because it is not only fully open and used widely but also simple and can be debugged flexibly. Besides, as for the communication of multiple units, Modbus can be developed fast and also can be conveniently connected with devices which support this protocol. There are two communication modes: RTU and ASCII. The former one is adopted for the BMS interface.

### 4.2. Protocol interface

The protocol interface adopts Modbus RTU protocol.

### 4.3. Hardware interface

- 1) Communication interface:RS485
- 2) Communication mode:  
 Baud rate: 9,600 bit/s  
 Start bit: 1  
 Data bit: 8  
 Check bit: None  
 Stop bit: 1

### 4.4. Universal communication frame format of Modbus under RTU mode

Start time interval	Addr. code	Function code	Data area	CRC check code	Stop time interval
T1-T2-T3-T4	1 Byte	1 Byte	n Bytes	2 Bytes	T1-T2-T3-T4

Under RTU mode, there is at least 3.5ms dead time before data transmission, which can be figured through the adopted baud rate (like T1-T2-T3-T4 in the table above) and there is another 3.5ms dead time after the transmission of the last character. After that, another set of data can be transmitted.

The whole set of data should be transmitted continuously. If there is a pause more than 1.5ms during the transmission, the receiver will jump to the transmission of the next set of data.

If the dead time is less than 3.5ms, the transmission will fail as the CRC for communication combination is ineffective.

### 4.5. MODBUS standard protocol format

#### 4.5.1. Coil (Bit)

Table 2 Coil data

Addr.	Corresponding Byte	Values(sample)
Bit 0	Byte0.0	1



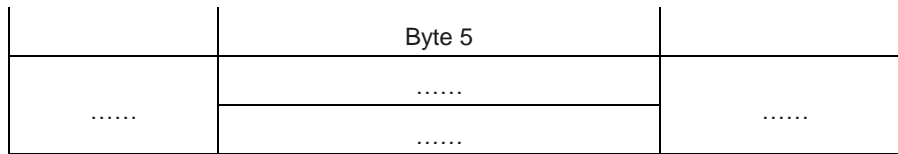
Bit 1	Byte0.1	0
Bit 2	Byte0.2	1
Bit 3	Byte0.3	0
Bit 4	Byte0.4	1
Bit 5	Byte0.5	0
Bit 6	Byte0.6	1
Bit 7	Byte0.7	0
Bit 8	Byte1.0	1
Bit 9	Byte1.1	0
Bit 10	Byte1.2	1
Bit 11	Byte1.3	0
Bit 12	Byte1.4	1
Bit 13	Byte1.5	0
Bit 14	Byte1.6	1
Bit 15	Byte1.7	0
.....	.....	.....

1. Coil indicates the data of some flag bit or failure bit, etc. It is expressed by one bit.
2. The unit of data is Bit and each Bit has a corresponding address.
3. Data bit exists in the byte of communication frame and each byte is composed of 8 bits. The high-order byte is corresponding to the high-order bit whereas the low-order byte is corresponding to the low-order bit. See table 2 for more details.
4. The master unit can operate one bit or multiple bits among the Modbus gateway data at the same time.
5. The bit count which the master unit can read or transmit is less than  $\text{byte} \times 8$ . The ineffective data bit of the last byte must be cleared when the effective data of communication frame is transmitted or read. For instance, when 9 bits (the value of each is 1) are read or transmitted, then 2 bytes are needed. The first one is "1111 1111" and the second one is "0000 0001". For the last byte, the ineffective bits are cleared.

### 4.5.2. Register (Word, 16 Bit)

Table 3 Register data

Addr.	Corresponding Byte addr.	Data (sample)
Word 0	Byte 0	AA 55
	Byte 1	
Word 1	Byte 2	AA 55
	Byte 3	
Word 2	Byte 4	55 AA



1. The unit of register is “word” , which has a corresponding address starting from 0.
2. When the master unit reads a word, it needs to read 2 bytes from the high order 8 bits to the low-order 8 bits.
3. When the master unit transmits or reads the request frame, it can transmit or read one or multiple continuous words in the data list.

### 4.5.3. Read Coil (Read Bit)

Note: it can read coil data but do not support the boardcast.

Function code: 0x01

Table 4 Request frame

Device addr.	Function code	Starting addr.	Data size	CRC
1 Byte	1 Byte	2 Bytes	2 Bytes	2 Bytes

Table 5 Corresponding frame

Device addr.	Function code	Byte count	Effective data	CRC
1 Byte	1 Byte	1 Byte	n Bytes	2 Bytes

Starting address: it is the starting place where to read a series of bits.

Data size: it indicates the count number of bits.

For example: read 10 bits from Coil 5 of Device 10 (see table 2 for Coil Data), as follows:

Request frame: 0A (device address) 01 (function code) 00 05 (starting address) 00 0A (data size) AD 77 (CRC)

Response frame: 0A (device address) 01 (function code) 02 (byte count) AA 02 (effective data) E3 5C (CRC)

The last byte is “0000 0010” ,among which the ineffective bits are the bits ahead of” 10” .Ineffective bits must be cleared.

### 4.5.4. Write Coil (Write Bit)

Note: the master unit writes coil data into Modbus gateway and it supports the broadcast.

Function code: 0x0F

Table 6 Request frame

Device addr.	Function code	Starting addr.	Data size	Byte count	Effective data	CRC
1 Byte	1 Byte	2 Bytes	2 Bytes	1 Byte	n Bytes	2 Bytes

Table 7 Response frame

Device addr.	Function code	Starting addr.	Data size	CRC

1 Byte	1 Byte	2 Bytes	2 Bytes	2 Bytes
Note: the response frame has the same device address, same function code, same starting address and same data size as the request frame.				

For example: Set 11 consecutive bits to “1” from Device 10, starting at the address 6, as follows:

Request frame: 0A (device address) 0F (function code) 00 06 (starting address) 00 0B(data size) 02 (byte count) FF 07 (effective data) 97 A0 (CRC)

Response frame: 0A (device address) 0F (function code) 00 06 (starting address) 00 0B (data size) F5 76 (CRC)

The last byte is “0000 0111”, among which the ineffective bits are the bits ahead of “111”. Ineffective bits must be cleared.

### 4.5.5. Read Register (Read Word)

Note: it can read register data of Modbus gateway but do not support the broadcast.

Function code: 0x03

Table 8 Request frame

Device addr.	Function code	Starting addr.	Data size	CRC
1 Byte	1 Byte	2 Bytes	2 Bytes	2 Bytes

Table 9 Response frame

Device addr.	Function code	Byte count	Effective data	CRC
1 Byte	1 Byte	1 Byte	n Bytes	2 Bytes

Starting address: it indicates the starting address to read word data block.

Data size: it indicates the count number of words with the maximum of 127 each time.

For example: Read 2 continuous words (see table 3 for Register Data) into Device 10, starting at the address 1, as follows:

Request frame: 0A (device address) 03 (function code) 00 01 (starting address) 00 02 (data size) 94 B0 (CRC)

Response frame: 0A (device address) 03 (function code) 04 (byte count) AA 55 55 AA (effective data) CE 14 (CRC)

### 4.5.6. Write Register (Write Word)

Note: write control data from the master unit into the register and it supports the broadcast. Function: 0x10

Table 10 Request frame

Device addr.	Function code	Starting addr.	Data size	Byte count	Effective data	CRC
1 Byte	1 Byte	2 Bytes	2 Bytes	1 Byte	n Bytes	2 Bytes

Table 11 Response frame

Device addr.	Function code	Starting addr.	Data size	CRC
1 Byte	1 Byte	2 Bytes	2 Bytes	2 Bytes
Note: the response frame has the same device address, same function code, same starting address and same data size as the request frame.				

For example: Write 3 words (0x12, 0x23, 0x34) into Device 10, starting at the address 2, as follows:

Request frame: 0A (device address) 10 (function code) 00 02 (starting address) 00 03 (data size) 06 (byte count) 00 12 00 23 00 34 (effective data) 15 DF (CRC)

Response frame: 0A (device address) 10 (function code) 00 02 (starting address) 00 03 (data size) 20 B3 (CRC)

### 4.5.7. Error response

Note: the master unit sends out a request frame in order to receive a normal response, but when Modbus gateway detects an error, an error response will be sent back.

Function code: the highest bit of the function code of request frame is set to “1”, which is the value figured through the operation of the function code of request frame with 0x80 (the function code of normal response will be back as it is).

Communication format of the error response frame:

Table 12 Error response frame

Device addr.	Function code	Error code	CRC
1 Byte	1 Byte	1 Bytes	2 Bytes

Description of error codes:

Table 13 Error Codes

Error	Name	Description
0x03	Illegal data	The transmitted data is incorrect or beyond the data range.
0x04	Slave device failure	Communication failure occurs between Modbus gateway and the air conditioning unit.

For example: The master unit is to read 128 words from Device 10, starting at the address 0. If it is out of the readable range of Modbus, error frame will be sent back as follows:

Request frame: 0A (device address) 03 (function code) 00 00 (starting address) 00 80 (data size) 45 11 (CRC)


Response frame: 0A (device address) 83 (function code) 03 (error code) 70 F3 (CRC)

# V.Communication Protocol on Multi VRF and Fresh Air Unit (CAN) Series

## 5.1. General

Multi VRF and Fresh Air Unit Series (CAN) have been integrated with BMS interface that supports Modbus protocol. The long-distance monitoring system for Units Series (CAN) can be used to monitor Gree Multi VRF and Fresh air Units or be incorporated into the BMS system on user side. By monitoring the PC or BMS system, user can realize a centralized management and control over the units. It is a highly efficient tool for the management of an intelligent air conditioning system in modern buildings.

This interface can not only realize long-distance monitoring over the units, including units' running temperature, compressor status and error status, but also can enable settings remotely, such as temperature setting, mode setting, on/off setting, mode shield, On/Off shield, etc.

 In this protocol, "R" indicates "read only" and "W/R" indicates "write and read".

## 5.2. Precautions before the Development of BMS Interface

Before the development of BMS interface, please make sure the DIP switch of Modbus gateway is correctly set and wired.

### Precautions for the design of BMS software:

#### Multi VRF system series:

★ (1) If the mode set by BMS software is in conflict with the cooling/heating function of outdoor unit, it will be ineffective. We recommend enabling the indication of ineffective operation on the monitoring software:

If the outdoor unit provides cooling function only, heating/floor heating/warming/fast heating will be ineffective;

If the outdoor unit provides heating function only, cooling/drying will be ineffective;

If the outdoor unit provides fan ventilation only, any mode except fan/fresh air will be ineffective.

★ (2) If the indoor unit mode set by BMS software is in conflict with the mode of master indoor unit, it will be ineffective; floor heating/warming/fast heating will be effective only for models that are designed with these functions.

★ (3) When the format of error response frame received by BMS system is 0x04, it indicates that there is communication failure between units and the gateway.

★ (4) Energy saving solution:

When the "energy-saving" parameter is enabled, all kinds of temperature lower limit and upper limit will be effective.

Temperature lower limit under cooling: If the setting for energy saving is enabled, the temperature set by BMS software will be effective only when it is higher than the temperature lower limit for energy saving; otherwise, units will not respond to the command. We recommend enabling the indication of ineffective operation on BMS software. The principles of temperature lower limit and upper limit under drying mode, fast

heating mode and warming mode are the same.

Temperature upper limit under heating: If the setting for energy-saving is enabled, the temperature set by BMS software will be effective only when it is lower than the temperature upper limit for energy saving; otherwise, units will not respond to the command. We recommend enabling the indication of ineffective operation on BMS software.

★ (5) All the data sent by BMS software to the gateway must be verified to see if they are effective.

★ (6) After the gateway is powered on and before receiving any effective data, error code 04 will be reported.

★ (7) Any compulsory mode of outdoor unit takes priority over the control of BMS software. Under compulsory mode, the control of BMS software will be ineffective.

★ (8) Long-distance lock

It can be set under any condition;

Under the status of long-distance lock, compulsory mode of outdoor unit and hardware reset of indoor unit can be effective.

★ (9) On/Off

If power supply is insufficient so that units have to be shut off compulsorily (error code L8 is displayed), the command of Unit On sent by BMS software will be ineffective.

For any other cases, the command of Unit On/Off sent by BMS software can be effective.

★ (10) Long-distance On/Off shield, On shield, Off shield

Above settings can be enabled under any condition.

Under any of these three settings, indoor unit timer will be temporarily ineffective (timer icon stays) and cannot be set, but it can be canceled by remote control;

★ (11) 8° heating function (i.e. absence mode)

This function can be effective only under heating mode. When the unit turns to other modes, it will exit from 8° heating function (i.e. absence mode);

8° heating function (i.e. absence mode) and long-distance temperature shield are mutually exclusive, whichever comes first will be effective; in other words, if long-distance temperature shield has been set, then 8° heating function (i.e. absence mode) cannot be set; if the indoor unit is already working with 8° heating function (i.e. absence mode), long-distance temperature shield will be ineffective;

★ (12) Low temperature dehumidifying

It will be effective only under dehumidifying mode. If the unit turns to other modes, it will exit from low temperature dehumidifying;

Low temperature dehumidifying and long-distance temperature shield are mutually exclusive, same as the case for 8° heating function (i.e. absence mode).

Under low temperature dehumidifying, the set temperature must be 12°.

★ (13) Set temperature

When the unit is under the status of 8° heating function (i.e. absence mode) or low temperature dehumidifying, set temperature must be 8° or 12° and temperature set by BMS software will be ineffective.

When indoor units are under energy saving mode, the temperature set by BMS software will be ineffective if it is out of temperature limits (for example, in case that the temperature lower limit for energy saving in cooling mode is 20°, if the temperature set by BMS software is lower than 20°, it will be ineffective); if BMS software sets temperature shield, then energy saving function will be temporarily ineffective and units will respond to the command of set temperature sent by BMS software.

★ (14) Shield temperature setting

Temperature setting shield is mutually exclusive with absence mode (8° heating function) and low temperature dehumidifying (whichever comes first will be effective);

Under temperature setting shield, energy saving function will be temporarily ineffective;

Under temperature setting shield, sleep function will be canceled and cannot be set.

★ (15) Energy saving and its temperature limits

Under fan mode, energy saving setting is ineffective;

Under temperature setting shield, energy saving function will be temporarily ineffective (energy saving icon stays);

Temperature limits for energy saving are effective under any conditions.

★ (16) Shield energy saving

It can be set under any conditions.

★ (17) Sleep

At present, the indoor unit has only the sleep mode 2, the setting of sleep mode 1,2 and 3 in long-distance monitoring shall be analysed as sleep mode 2, and the replied status of indoor unit is sleep mode 2 as well.

While shielding the set temperature, sleeping mode will be cancelled, and sleeping mode can not be set.

While adjusting the set temperature (including the software of BMS system), sleeping time will be recalculated.

★ (18) Fan speed

Under drying mode, low fan speed is compulsory. BMS software cannot enable any other speed;

When BMS software is setting fan speed, if indoor unit is under turbo or compulsory quiet status, it will exist from such status; if indoor unit is set with 8° heating function (i.e. absence mode), fan speed must be auto speed only;

If the indoor unit is designed with a 3-speed fan motor, the five speed commands sent by BMS software should be interpreted like this: low speed and low-medium speed both refer to low speed; medium speed is medium speed; medium-high speed and high speed both refer to high speed;

★ (19) Turbo

This setting can be effective only under cooling/heating mode.

Under the status of 8° heating function (i.e. absence mode), turbo mode cannot be set;

When indoor unit is running in quiet mode and BMS software enables turbo running, indoor unit will respond to this setting and exit from quiet mode.

★ (20) Quiet

Quiet setting is connected with the unit logic under dehumidifying /fan mode.

Under the status of 8° heating function (i.e. absence mode), quiet mode cannot be set;

When indoor unit is in turbo running status and BMS software enables quiet setting, indoor unit will respond to this setting and exit from turbo running status.

★ (21) Swing

Parameter under the swing mode differs from model to model.

★ (22) X-Fan

It will be effective only when the unit is running in cooling/ dehumidifying mode. If the unit turns to other modes, X-Fan will not be canceled.

★ (23) Air

Air function set by BMS software will be effective under any conditions.

If the unit is powered off by hand (including BMS software) or by timer, air function will be off;

★ (24) Reminder and clearing of filter cleaning: both can be set under any conditions;

★ (25) Shield timer

It can be set under any conditions.

Under timer shield, indoor unit timer will be temporarily ineffective (timer icon stays); timer will not be displayed and cannot be set; when timer shield is canceled, timer function will be restored;

★ (26) Auxiliary heating forbiddance

It can be set under any conditions.

For export models, auxiliary heating control function and forbiddance function are not applicable.

★ (27) On/Off status/long-distance emergency stop

The parameter will read the operation status (On/Off status of outdoor unit) of system compressor and write long-distance emergency stop for the system.

★ (28) Communication error

Errors will occur when the outdoor unit can not receive datas from any indoor units or communication errors happen inside the module.

★ (29) Nonpolarity of Modbus interface

A.4 Rotation mechanism for the nonpolarity of Gateway Modbus interface

★ (30) The notices shall match with the models connected to the actual network.

★ (31) If engineering information of the unit is changed, the gateway needs rebugging.

★ (32) All indoor units of CAN2 will reply the group control command of the gateway.

**fresh air unit series:**

If the fresh air unit is connected to the air box, wired controller must be allocated.

Reserved function: means the fresh air unit does not support this function temporarily.

Parameter of indoor air box: at present, the fresh air unit can only be connected to 2 air boxes, parameter for air box 3, 4 and 5 is reserved.

★ (34) The ODU No. of IDU: applies to the fresh air unit as well

★ (35) Auto control method setting applies to the exported unit only.



★ (36) Communication error between IDU and indoor box: it will report error even the wired controller is not connectd, because the box shall match with the wired controller.

### 5.3. Definitions of Effective Data

Data for Modbus communication protocol can be dicided into two types: switching value and register. The latter one indicates the values of temperature, valves and other continuous or multi-mode values, while the former one indicates the value which has two kinds of status only, for example, the temperature sensor error has two kinds of status: abnormal and normal.

#### 1. Data and address distribution of analog quantity of multi VRF system: (Word 0~Word 4118)

Address	Access type(R-read only) W/R-read and write	Data meaning	Range	Precision	Unit	Data type	Notice on BMS software design (data with ☆ mark) shall refer to 5.2	Remark
Word 101	R	Project No. of starting indoor unit of gateway	Transmission value=actual value Actual value: 1;129	/	/	Uint16		Gateway data
Word 102	W/R	Power on/Power off	Transmission value=actual value Actual value: power on: 0xAA; power off:0x55	/	/	Uint16	☆ (9)	IDU 1 data
Word 103	W	Set the operation mode	Transmission value=actual value Actual value: 0: invalid; 1:cooling; 2:dehumidifying; 3:air supply; 4:heating; 5:auto; 6:floor heating; 7:fast heat; 8:heat supply	/	/	Uint16	☆ (2)	
	R	Read the operation mode	Transmission value=actual value Actual value: 01:cooling; 02:dehumidifying; 03:air supply; 04:heating; 05:auto cooling; 06:auto heating; 07:floor heating; 08:fast heat; 09:heat supply; 0A:clothes drying;0B:air discharge; 0C:cool; 0D:auto dehumidifying	/	/	Uint16		
Word 104	W/R	Temperature setting	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (13)	
			Transmission value=actual value					

Word 105	W	Fan speed setting	Actual value: 0 invalid; 1:auto fan speed; 2: low fan speed; 3: medium low fan speed; 4:medium fan speed; 5: medium high fan speed; 6: high fan speed; 7: turbo fan speed	/	/	Uint16	
	R	Read fan speed	Transmission value=actual value Actual value: 01: fan stops; 02:super low fan speed; 03:low fan speed; 04:medium low fan speed; 05:medium fan speed; 06:medium high fan speed; 07:high fan speed; 08:super high fan speed; 09:quiet fan speed R1;0A: quiet fan speed R2; 0B: quiet fan speed R3	/	/	Uint16	
Word 106	W/R	Lower limit temperature of cooling energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
Word 107	W/R	Upper limit temperature of heating energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
Word 108	W/R	Lower limit temperature of dehumidifying energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
...							
Word 115	R	Air outlet temperature	Transmission value=actual value+100 Range of actual value: -30~138	1	℃	Uint16	
Word 116	R	Indoor ambient temperature	Transmission value=actual value×10, Actual value range: -30~138	0. 1		Floatin g-poin t type	

Word 117	R	Gate control status	Transmission value=actual value, Actual value: 0:invalid; 1.without gate control; 2.insert card; 3.disconnect card	/	/	Uint16	
Word 118	R	Outdoor unit number which indoor unit belongs to	Transmission value=actual value Actual value range: 1~16	/	/	Uint16	
Word 119	R	Category of Indoor Unit Model	Transmission value=actual value Range of actual value: 0-225 1: Duct type unit 2: Cassette 3: Wall mounted unit 4: Floor ceiling unit 5: Floor standing unit 6: Multi VRF fresh air indoor unit 7: Water heater 8: Water adaptor 9: Total heat recovery fresh air 10: Total heat recovery fresh air + heat exchanger 11: AHU-KIT 12: Air Handler 13: Console Type 14: Concealed Floor Standing Type FF:Other	/	/	Uint16	
...							
Word 123	R	Rated capacity of indoor unit	Transmission value=actual value Actual value: 22;25;28;32;36;40;45;50;56;63;71;80;90;100;112;125;140;160;180;224;250;280;335;350;400;450;500;560	1	hectawat	Uint16	
Word 124	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9	/	/	Uint16	Motor model for alternating current
Word 125	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9, 10: static pressure 10, 11: static pressure 11, 12: static pressure 12, 13: static pressure 13	/	/	Uint16	Motor model for direct current
...							

Word 102+25 *(n-1)	W/R	Power on/Pow er off	Transmission value=actual value, Actual value: power on: 0xAA; power off: 0x55	/	/	Uint16	☆ (9)	IDU n data
Word 103+25 *(n-1)	W	Operati on mode setting	Transmission value=actual value Actual value: 0:invalid; 1:cooling; 2:dehumidifying; 3:fan; 4:heating 5:auto 6:floor heating 7:quick heat; 8:heat supply	/	/	Uint16	☆ (2)	
	R	Read operati on mode	Transmission value=actual value Actual value: 01:cooling; 02:dehumidifying; 03:air; 04:heating; 05:auto cooling; 06:auto heating; 07:floor heating; 08:fast heat; 09:heat supply; 0A: clothes drying; 0B: air discharge; 0C:cool; 0D: auto dehumidifying	/	/	Uint16		
Word 104+25 *(n-1)	W/R	Temper ature setting	Transmission value=actual value×10 Actual value range: 16.0~30.0	1	℃	Uint16	☆ (13)	
Word 105+25 *(n-1)	W	Fan speed setting	Transmission value=actual value Actual value: 0:invalid; 1:auto fan speed; 2:low fan speed; 3:medium low fan speed; 4:medium fan speed; 5:medium high fan speed; 6:high fan speed; 7: turbo fan speed	/	/	Uint16	☆ (4)	
	R	Read fan speed	Transmission value=actual value Actual value: 01:fan stops; 02:super low fan speed; 03:low fan speed; 04:medium low fan speed; 05: medium fan speed; 06:medium high fan speed; 07:high fan speed; 08:super high fan speed; 09:quiet fan speed R1; 0A: quiet fan speed R2; 0B: quiet fan speed R3	/	/	Uint16		
Word 106+25 *(n-1)	W/R	Lower limit temper ature of cooling energy saving	Transmission value=actual value×10 Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)	
Word 107+25 *(n-1)	W/R	Upper limit temper ature of heating energy	Transmission value=actual value×10 Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)	

		saving					
Word 108+25 *(n-1)	W/R	Lower limit temper ature of dehumi difying energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
...							
Word 115+25 *(n-1)	R	Air outlet temper ature	Transmission value=actual value+100 Range of actual value: -30~138	1	℃	Uint16	
Word 116+25 *(n-1)	R	Indoor ambient temper ature	Transmission value=actual value×10 Actual value range: -30~138	0. 1		Floating-poin t type	
Word 117+25 *(n-1)	R	Gate control status	Transmission value=actual value×10 Actual value: 0:invalid; 1:without gate control; 2:insert card; 3:disconnect card	/	/	Uint16	
Word 118+25 *(n-1)	R	Outdoo r unit number which indoor unit belongs to	Transmission value=actual value Actual value range: 1~16	/	/	Uint16	
Word 119+25 *(n-1)	R	Categor y of Indoor Unit Model	Transmission value=actual value Range of actual value: 0-225 1: Duct type unit 2: Cassette 3: Wall mounted unit 4: Floor ceiling unit 5: Floor standing unit 6: Multi VRF fresh air indoor unit 7: Water heater 8: Water adaptor 9: Total heat recovery fresh air 10: Total heat recovery fresh air + heat exchanger 11: AHU-KIT 12: Air Handler 13: Console Type 14: Concealed Floor StandingType FF:Other	/	/	Uint16	
...							

Word 123+25 *(n-1)	R	Rated capacity of indoor unit	Transmission value=actual value Actual value: 22;25;28;32;36;40;45;50;56;63;71;80;90;100;112;125;140;160;180;224;250;280;335;350;400;450;500;560	1	hectowatt	Uint16	
Word 124+25 *(n-1)	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9	/	/	Uint16	Motor model for alternating current
Word 125+25 *(n-1)	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9, 10: static pressure 10, 11: static pressure 11, 12: static pressure 12, 13: static pressure 13	/	/	Uint16	Motor model for direct current
...							
Word 3277	W/R	Power on/Power off	Transmission value=actual value Actual value: power on:0xAA; power off:0x55	/	/	Uint16	☆ (9)
Word 3278	W	Operation mode setting	Transmission value=actual value Actual value:0:invalid;1:cooling;2:dehumidifying; 3:fan;4:heating; 5:auto;6:floor heating; 7:fast heat; 8:heat supply	/	/	Uint16	☆ (2)
	R	Read operation mode	Transmission value=actual value Actual value:01:cooling; 02: dehumidifying; 03:fan; 04:heating; 05:auto cooling; 06:auto heating; 07:floor heating; 08:fast heat; 09:heat supply; 0A:clothes drying; 0B:air discharge; 0C:cool; 0D:auto dehumidifying	/	/	Uint16	IDU 128 data
...							
Word 3279	W/R	Temperature setting	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (13)
Word 3280	W	Fan speed setting	Transmission value=actual value Actual value:0:invalid; 1:auto fan speed; 2:low fan speed; 3:medium low fan speed; 4:medium fan speed; 5:medium high fan speed; 6:high fan speed; 7:turbo fan	/	/	Uint16	

			speed				
	R	Read fan speed	Transmission value=actual value Actual value: 01:fan stops; 02:super low fan speed; 03:low fan speed; 04:medium low fan speed; 05:medium fan speed; 06:medium high fan speed; 07:high fan speed; 08:super high fan speed; 09:quiet fan speed R1; 0A:quiet fan speed R2: 0B: quiet fan speed R3	/	/	Uint16	
Word 3281	W/R	Lower limit temperature of cooling energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
Word 3282	W/R	Upper limit temperature of heating energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
Word 3283	W/R	Lower limit temperature of dehumidifying energy saving	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (4)
...							
Word 3290	R	Air outlet temperature	Transmission value=actual value+100 Range of actual value: -30~138	1	℃	Uint16	
Word 3291	R	Indoor ambient temperature	Transmission value=actual value×10, Actual value range: -30~138	0. 1	℃	Floating-point type	

Word 3292	R	Gate control status	Transmission value=actual value Actual value:0:invalid; 1: without gate control; 2:insert card; 3:disconnect card	/	/	Uint16	
Word 3293	R	Outdoor unit number which indoor unit belongs to	Transmission value=actual value Actual value range: 1~16	/	/	Uint16	
Word 3294	R	Category of Indoor Unit Model	Transmission value=actual value Range of actual value: 0-225 1: Duct type unit 2: Cassette 3: Wall mounted unit 4: Floor ceiling unit 5: Floor standing unit 6: Multi VRF fresh air indoor unit 7: Water heater 8: Water adaptor 9: Total heat recovery fresh air 10: Total heat recovery fresh air + heat exchanger 11: AHU-KIT 12: Air Handler 13: Console Type 14: Concealed Floor StandingType FF:Other	/	/	Uint16	
...							
Word 3298	R	Rated capacity of indoor unit	Transmission value=actual value Actual value: 22;25;28;32;36;40;45;50;56;63;71;80;90;100;112;125;140;160;180;224;250;280;335;350;400;450;500;560	1	hectowatt	Uint16	
Word 3299	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9	/	/	Uint16	Motor model for alternating current
Word 3300	R	Static pressure value	0:invalid, 1:static pressure 1, 2:static pressure 2, 3:static pressure 3, 4:static pressure 4, 5:static pressure 5, 6:static pressure 6, 7:static pressure 7, 8:static pressure 8, 9:static pressure 9, 10: static pressure 10, 11: static pressure 11, 12: static pressure 12, 13: static pressure 13	/	/	Uint16	Motor model for direct current
...							



Word 3302	W/R	Setting upper limit capacity of outdoor unit	Transmission value=actual value Actual value range: 30~100	/	%	Uin16		System 1 data
Word 3303	R	Startup quantity of general indoor unit	Transmission value=actual value Range of actual value: 0~255	/	/	Uin16		
...								
Word 3306	R	Complete unit cooling and heating mode	Transmission value=actual value, Actual value:0:invalid 1:cooling only; 2:heating; 3:cooling and heating 4:fan	/			☆ (1)	
Word 3307	R	Outdoor ambient temperature	Transmission value=actual value×10, Actual value range: -35~155	0.1	℃			
Word 3308	R	Emergency operation mode	Transmission value=actual value Actual value:0: invalid 1: without emergency operation; 2:emergency operation of compressor; 3:emergency operation of fan; 4:emergency operation of module;					
...								
Word 3302+10*(m-1)	W/R	Setting upper limit capacity of outdoor unit	Transmission value=actual value Actual value range: 30~100	/	%	Uin16		System m data
Word 3303+10*(m-1)	R	Startup quantity of general indoor unit	Transmission value=actual value Range of actual value: 0~255	/	/	Uin16		

...							
Word 3306+1 0*(m-1)	R	Complete unit cooling and heating mode	Transmission value=actual value Actual value: 0:invalid 1:cooling only 2:heating 3:cooling and heating 4:fan	/		Uint16	☆ (1)
Word 3307+1 0*(m-1)	R	Outdoor ambient temperature	Transmission value=actual value×10, Actual value range: -35~155	0.1	℃	Floating-point type	
Word 3308+1 0*(m-1)	R	Emergency operation mode	Transmission value=actual value Actual value: 0: invalid 1:without emergency operation; 2:emergency operation of compressor; 3:emergency operation of fan; 4:emergency operation of module;				
...							
Word 3452	W/R	Setting upper limit capacity of outdoor unit	Transmission value=actual value Actual value range: 30~100	/	%	Uint16	
Word 3453	R	Startup quantity of general indoor unit	Transmission value=actual value Range of actual value: 0~255	/	/	Uint16	
...							
Word 3456	R	Complete unit cooling and heating mode	Transmission value=actual value	/		Uint16	☆ (1)
			Actual value: 0:invalid; 1:cooling only; 2:heating; 3:cooling and heating; 4:fan				
Word 3457	R	Outdoor	Transmission value=actual value×10, Actual value range: -35~155	0.1	℃	Floating-point type	

System 16 data

		ambient temperature						
Word 3458	R	Emergency operation mode	Transmission value=actual value Actual value: 0: invalid 1.without emergency operation; 2:emergency operation of compressor; 3:emergency operation of fan; 4: emergency operation of module.					
...								
Word 3463	W	Mode setting of all indoor units	[Setting]:Transmission value=actual value, Actual value:0:invalid; 1:cooling; 2:dehumidifying; 3:fan; 4:heating; 5:auto; 6:floor heating; 7:fast heat; 8:heat supply				☆ (2)	Gateway data
Word 3464	W	Temperature setting of all indoor units	Transmission value=actual value×10, Actual value range: 16.0~30.0	1	℃	Uint16	☆ (13)	Gateway data
Word 3465	W	Fan speed setting of all indoor units	[Setting]:Transmission value=actual value, Actual value:0:invalid; 1:auto fan speed; 2:low fan speed; 3:medium low fan speed; 4:medium fan speed; 5:medium high fan speed; 6:high fan speed; 7:turbo fan speed				☆ (17) ☆ (18)	Gateway data
...								

**2. (Bit 0~Bit 10921) Data and address distribution of switching value of multi VRF system**

Address	Access Type(R-read W/R-write/read)	Data meaning	Range	Parameter type	Notes (data with ☆) on designing BMS software shall refer to 5.2	Remarks
...						

Bit 88	R	System 1 with/without	0: without 1: with	Status parameter		System 1~16 With/without
Bit 89	R	System 2 with/without	0: without 1: with	Status parameter		
Bit 90	R	System 3 with/without	0: without 1: with	Status parameter		
Bit 91	R	System 4 with/without	0: without 1: with	Status parameter		
Bit 92	R	System 5 with/without	0: without 1: with	Status parameter		
Bit 93	R	System 6 with/without	0: without 1: with	Status parameter		
Bit 94	R	System 7 with/without	0: without 1: with	Status parameter		
Bit 95	R	System 8 with/without	0: without 1: with	Status parameter		
Bit 96	R	System 9 with/without	0: without 1: with	Status parameter		
Bit 97	R	System 10 with/without	0: without 1: with	Status parameter		
Bit 98	R	System 11 with/without	0: without 1: with	Status parameter		
Bit 99	R	System 12 with/without	0: without 1: with	Status parameter		
Bit 100	R	System 13 with/without	0: without 1: with	Status parameter		
Bit 101	R	System 14 with/without	0: without 1: with	Status parameter		
Bit 102	R	System 15 with/without	0: without 1: with	Status parameter		
Bit 103	R	System 16 with/without	0: without 1: with	Status parameter		
...						
Bit 120	R	IDU 1 with/without	0: without 1: with	Status parameter		IDU 1~ 128 with/without
Bit 121	R	IDU 2 with/without	0: without 1: with	Status parameter		
Bit 122	R	IDU 3 with/without	0: without 1: with	Status parameter		
Bit 123	R	IDU 4 with/without	0: without 1: with	Status parameter		
Bit 124	R	IDU 5 with/without	0: without 1: with	Status parameter		
Bit 125	R	IDU 6 with/without	0: without 1: with	Status parameter		
Bit 126	R	IDU 7 with/without	0: without 1: with	Status parameter		
Bit 127	R	IDU 8 with/without	0: without 1: with	Status parameter		
Bit 128	R	IDU 9 with/without	0: without 1: with	Status parameter		
Bit 129	R	IDU 10 with/without	0: without 1: with	Status parameter		
Bit 130	R	IDU 11 with/without	0: without 1: with	Status parameter		
Bit 131	R	IDU 12 with/without	0: without 1: with	Status parameter		
Bit 132	R	IDU 13 with/without	0: without 1: with	Status parameter		
Bit 133	R	IDU 14 with/without	0: without 1: with	Status parameter		
Bit 134	R	IDU 15 with/without	0: without 1: with	Status parameter		
Bit 135	R	IDU 16 with/without	0: without 1: with	Status parameter		
Bit 136	R	IDU 17 with/without	0: without 1: with	Status parameter		
Bit 137	R	IDU 18 with/without	0: without 1: with	Status parameter		
Bit 138	R	IDU 19 with/without	0: without 1: with	Status parameter		
Bit 139	R	IDU 20 with/without	0: without 1: with	Status parameter		
Bit 140	R	IDU 21 with/without	0: without 1: with	Status parameter		
Bit 141	R	IDU 22 with/without	0: without 1: with	Status parameter		
Bit 142	R	IDU 23 with/without	0: without 1: with	Status parameter		
Bit 143	R	IDU 24 with/without	0: without 1: with	Status parameter		
Bit 144	R	IDU 25 with/without	0: without 1: with	Status parameter		

Bit 145	R	IDU 26 with/without	0: without 1: with	Status parameter	
Bit 146	R	IDU 27 with/without	0: without 1: with	Status parameter	
Bit 147	R	IDU 28 with/without	0: without 1: with	Status parameter	
Bit 148	R	IDU 29 with/without	0: without 1: with	Status parameter	
Bit 149	R	IDU 30 with/without	0: without 1: with	Status parameter	
Bit 150	R	IDU 31 with/without	0: without 1: with	Status parameter	
Bit 151	R	IDU 32 with/without	0: without 1: with	Status parameter	
Bit 152	R	IDU 33 with/without	0: without 1: with	Status parameter	
Bit 153	R	IDU 34 with/without	0: without 1: with	Status parameter	
Bit 154	R	IDU 35 with/without	0: without 1: with	Status parameter	
Bit 155	R	IDU 36 with/without	0: without 1: with	Status parameter	
Bit 156	R	IDU 37 with/without	0: without 1: with	Status parameter	
Bit 157	R	IDU 38 with/without	0: without 1: with	Status parameter	
Bit 158	R	IDU 39 with/without	0: without 1: with	Status parameter	
Bit 159	R	IDU 40 with/without	0: without 1: with	Status parameter	
Bit 160	R	IDU 41 with/without	0: without 1: with	Status parameter	
Bit 161	R	IDU 42 with/without	0: without 1: with	Status parameter	
Bit 162	R	IDU 43 with/without	0: without 1: with	Status parameter	
Bit 163	R	IDU 44 with/without	0: without 1: with	Status parameter	
Bit 164	R	IDU 45 with/without	0: without 1: with	Status parameter	
Bit 165	R	IDU 46 with/without	0: without 1: with	Status parameter	
Bit 166	R	IDU 47 with/without	0: without 1: with	Status parameter	
Bit 167	R	IDU 48 with/without	0: without 1: with	Status parameter	
Bit 168	R	IDU 49 with/without	0: without 1: with	Status parameter	
Bit 169	R	IDU 50 with/without	0: without 1: with	Status parameter	
Bit 170	R	IDU 51 with/without	0: without 1: with	Status parameter	
Bit 171	R	IDU 52 with/without	0: without 1: with	Status parameter	
Bit 172	R	IDU 53 with/without	0: without 1: with	Status parameter	
Bit 173	R	IDU 54 with/without	0: without 1: with	Status parameter	
Bit 174	R	IDU 55 with/without	0: without 1: with	Status parameter	
Bit 175	R	IDU 56 with/without	0: without 1: with	Status parameter	
Bit 176	R	IDU 57 with/without	0: without 1: with	Status parameter	
Bit 177	R	IDU 58 with/without	0: without 1: with	Status parameter	
Bit 178	R	IDU 59 with/without	0: without 1: with	Status parameter	
Bit 179	R	IDU 60 with/without	0: without 1: with	Status parameter	
Bit 180	R	IDU 61 with/without	0: without 1: with	Status parameter	
Bit 181	R	IDU 62 with/without	0: without 1: with	Status parameter	
Bit 182	R	IDU 63 with/without	0: without 1: with	Status parameter	
Bit 183	R	IDU 64 with/without	0: without 1: with	Status parameter	
Bit 184	R	IDU 65 with/without	0: without 1: with	Status parameter	
Bit 185	R	IDU 66 with/without	0: without 1: with	Status parameter	
Bit 186	R	IDU 67 with/without	0: without 1: with	Status parameter	

Bit 187	R	IDU 68 with/without	0: without 1: with	Status parameter	
Bit 188	R	IDU 69 with/without	0: without 1: with	Status parameter	
Bit 189	R	IDU 70 with/without	0: without 1: with	Status parameter	
Bit 190	R	IDU 71 with/without	0: without 1: with	Status parameter	
Bit 191	R	IDU 72 with/without	0: without 1: with	Status parameter	
Bit 192	R	IDU 73 with/without	0: without 1: with	Status parameter	
Bit 193	R	IDU 74 with/without	0: without 1: with	Status parameter	
Bit 194	R	IDU 75 with/without	0: without 1: with	Status parameter	
Bit 195	R	IDU 76 with/without	0: without 1: with	Status parameter	
Bit 196	R	IDU 77 with/without	0: without 1: with	Status parameter	
Bit 197	R	IDU 78 with/without	0: without 1: with	Status parameter	
Bit 198	R	IDU 79 with/without	0: without 1: with	Status parameter	
Bit 199	R	IDU 80 with/without	0: without 1: with	Status parameter	
Bit 200	R	IDU 81 with/without	0: without 1: with	Status parameter	
Bit 201	R	IDU 82 with/without	0: without 1: with	Status parameter	
Bit 202	R	IDU 83 with/without	0: without 1: with	Status parameter	
Bit 203	R	IDU 84 with/without	0: without 1: with	Status parameter	
Bit 204	R	IDU 85 with/without	0: without 1: with	Status parameter	
Bit 205	R	IDU 86 with/without	0: without 1: with	Status parameter	
Bit 206	R	IDU 87 with/without	0: without 1: with	Status parameter	
Bit 207	R	IDU 88 with/without	0: without 1: with	Status parameter	
Bit 208	R	IDU 89 with/without	0: without 1: with	Status parameter	
Bit 209	R	IDU 90 with/without	0: without 1: with	Status parameter	
Bit 210	R	IDU 91 with/without	0: without 1: with	Status parameter	
Bit 211	R	IDU 92 with/without	0: without 1: with	Status parameter	
Bit 212	R	IDU 93 with/without	0: without 1: with	Status parameter	
Bit 213	R	IDU 94 with/without	0: without 1: with	Status parameter	
Bit 214	R	IDU 95 with/without	0: without 1: with	Status parameter	
Bit 215	R	IDU 96 with/without	0: without 1: with	Status parameter	
Bit 216	R	IDU 97 with/without	0: without 1: with	Status parameter	
Bit 217	R	IDU 98 with/without	0: without 1: with	Status parameter	
Bit 218	R	IDU 99 with/without	0: without 1: with	Status parameter	
Bit 219	R	IDU 100 with/without	0: without 1: with	Status parameter	
Bit 220	R	IDU 101 with/without	0: without 1: with	Status parameter	
Bit 221	R	IDU 102 with/without	0: without 1: with	Status parameter	
Bit 222	R	IDU 103 with/without	0: without 1: with	Status parameter	
Bit 223	R	IDU 104 with/without	0: without 1: with	Status parameter	
Bit 224	R	IDU 105 with/without	0: without 1: with	Status parameter	
Bit 225	R	IDU 106 with/without	0: without 1: with	Status parameter	
Bit 226	R	IDU 107 with/without	0: without 1: with	Status parameter	
Bit 227	R	IDU 108 with/without	0: without 1: with	Status parameter	
Bit 228	R	IDU 109 with/without	0: without 1: with	Status parameter	

Bit 229	R	IDU 110 with/without	0: without 1: with	Status parameter	
Bit 230	R	IDU 111 with/without	0: without 1: with	Status parameter	
Bit 231	R	IDU 112 with/without	0: without 1: with	Status parameter	
Bit 232	R	IDU 113 with/without	0: without 1: with	Status parameter	
Bit 233	R	IDU 114 with/without	0: without 1: with	Status parameter	
Bit 234	R	IDU 115 with/without	0: without 1: with	Status parameter	
Bit 235	R	IDU 116 with/without	0: without 1: with	Status parameter	
Bit 236	R	IDU 117 with/without	0: without 1: with	Status parameter	
Bit 237	R	IDU 118 with/without	0: without 1: with	Status parameter	
Bit 238	R	IDU 119 with/without	0: without 1: with	Status parameter	
Bit 239	R	IDU 120 with/without	0: without 1: with	Status parameter	
Bit 240	R	IDU 121 with/without	0: without 1: with	Status parameter	
Bit 241	R	IDU 122 with/without	0: without 1: with	Status parameter	
Bit 242	R	IDU 123 with/without	0: without 1: with	Status parameter	
Bit 243	R	IDU 124 with/without	0: without 1: with	Status parameter	
Bit 244	R	IDU 125 with/without	0: without 1: with	Status parameter	
Bit 245	R	IDU 126 with/without	0: without 1: with	Status parameter	
Bit 246	R	IDU 127 with/without	0: without 1: with	Status parameter	
Bit 247	R	IDU 128 with/without	0: without 1: with	Status parameter	
Bit 248	W/R	Remote emergent stop signal of system 1	0: off 1: on	Status parameter	Emergent stop signal of system 1~16
Bit 249	W/R	Remote emergent stop signal of system 2	0: off 1: on	Status parameter	
Bit 250	W/R	Remote emergent stop signal of system 3	0: off 1: on	Status parameter	
Bit 251	W/R	Remote emergent stop signal of system 4	0: off 1: on	Status parameter	
Bit 252	W/R	Remote emergent stop signal of system 5	0: off 1: on	Status parameter	
Bit 253	W/R	Remote emergent stop signal of system 6	0: off 1: on	Status parameter	
Bit 254	W/R	Remote emergent stop signal of system 7	0: off 1: on	Status parameter	
Bit 255	W/R	Remote emergent stop signal of system 8	0: off 1: on	Status parameter	
Bit 256	W/R	Remote emergent stop signal of system 9	0: off 1: on	Status parameter	
Bit 257	W/R	Remote emergent stop signal of system 10	0: off 1: on	Status parameter	
Bit 258	W/R	Remote emergent stop signal of system 11	0: off 1: on	Status parameter	
Bit 259	W/R	Remote emergent stop	0: off 1: on	Status parameter	

		signal of system 12				
Bit 260	W/R	Remote emergent stop signal of system 13	0: off 1: on	Status parameter		
Bit 261	W/R	Remote emergent stop signal of system 14	0: off 1: on	Status parameter		
Bit 262	W/R	Remote emergent stop signal of system 15	0: off 1: on	Status parameter		
Bit 263	W/R	Remote emergent stop signal of system 16	0: off 1: on	Status parameter		
...						
Bit 280	W	Set all IDUs on	0: no 1: yes	Status parameter	☆(32)	Group control
Bit 281	W	Set all IDUs off	0: no 1: yes	Status parameter	☆(32)	
Bit 282	W	Set all IDUs locked remotely	0: no 1: yes	Status parameter	☆(32)	
Bit 283	R	Reserved				
Bit 284	R	Reserved				
Bit 285	R	Reserved				
Bit 286	R	Reserved				
Bit 287	R	Reserved				
Bit 288	W/R	Remote shielding of energy-saving function	0:no shielded 1: shielded	Status parameter		IDU 1 data
Bit 289	W/R	Remote shielding temperature setting function	0: no shielded 1: shielded	Status parameter	☆(14)	
Bit 290	W/R	Remote shielding of mode function	0: no shielded 1: shielded	Status parameter		
Bit 291	W/R	Remote shielding of power on/power off function	0: no shielded 1: shielded	Status parameter	☆(10)	
Bit 292	W/R	Remote locking function	0: unlocked 1: locked	Status parameter	☆(8)	
Bit 293	W/R	Power supplied for IDUs in priority	0: no 1: yes	Status parameter	Electricity lacking mode of power supply system,	



					power supplied for IDUs in priority
Bit 294	W/R	Up-down swing	0: off 1: on	Status parameter	☆(21)
Bit 295	W/R	Left-right swing	0: off 1: on	Status parameter	☆(21)
Bit 296	W/R	Energy saving setting	0: off 1: on	Status parameter	☆(4) (15)
Bit 297	W/R	Forbidding power on of auxiliary heater	0: allow power of auxiliary heater; 1: forbid power on of auxiliary heater	Status parameter	☆(26)
Bit 298	W/R	IDU power failure memory	0: standby 1: power failure memory	Status parameter	
Bit 299	W/R	Cancel filter cleaning reminder	0: no 1: yes	Status parameter	☆(24)
Bit 300	W/R	Dry	0: off 1: on	Status parameter	☆(22)
Bit 301	W/R	Sleep	0: off 1: on	Status parameter	☆(17)
Bit 302	W/R	Quiet	0: off 1: on	Status parameter	☆(20)
Bit 303	W/R	Ventilation	0: off 1: on	Status parameter	☆(23)
Bit 304	W/R	Low-temperature dehumidification	0: cancel low-temperature dehumidification 1: start low-temperature dehumidification	Status parameter	☆(12)
Bit 305	W/R	Shielding on	0: no shielding 1: shielding	Status parameter	☆(10)
Bit 306	W/R	Shielding off	0: no shielding 1: shielding	Status parameter	☆(10)
Bit 307	W/R	Shielding timer	0: no shielding 1: shielding	Status parameter	☆(25)
Bit 308	W/R	Setting 8℃ heating function	0: cancel 8℃ heating function 1: start 8℃	Status parameter	☆(11)

			heating function			
Bit 309	R	Reserved				
Bit 310	R	Reserved				
Bit 311	R	Reserved				
Bit 312	R	Reserved				
Bit 313	R	Reserved				
Bit 314	R	Reserved				
Bit 315	R	Master IDU/slave IDU	0: Slave IDU 1: Master IDU	Status parameter	☆(2)	
Bit 316	R	Auxiliary electric heater of IDU	0: off 1: on	Status parameter		
Bit 317	R	Reserved				
Bit 318	R	Air outlet temperature sensor error	0: no 1: yes	Error parameter		
Bit 319	R	General error of indoor unit	0: no 1: yes	Error parameter		
...						
Bit 288+64*(n-1)	W/R	Remote shielding of energy saving function	0: no shielded 1: shielded	Status parameter		IDU n data
Bit 289+64*(n-1)	W/R	Remote shielding of temperature setting function	0: no shielded 1: shielded	Status parameter	☆(14)	
Bit 290+64*(n-1)	W/R	Remote shielding of mode function	0: no shielded 1: shielded	Status parameter		
Bit 291+64*(n-1)	W/R	Remote shielding of power on/power off function	0: no shielded 1: shielded	Status parameter	☆(10)	
Bit 292+64*(n-1)	W/R	Remote locking function	0: unlocked 1: locked	Status parameter	☆(8)	
Bit 293+64*(n-1)	W/R	Power supplied for IDUs in priority	0: no 1: yes	Status parameter	Electricity lacking mode of power supply system	

					m, power suppli ed for IDUs in priorit y
Bit 294+64*( n-1)	W/R	Up-down swing	0: off 1: on	Status parameter	☆(21 )
Bit 295+64*( n-1)	W/R	Left-right swing	0: off 1: on	Status parameter	☆(21 )
Bit 296+64*( n-1)	W/R	Energy saving setting	0: off 1: on	Status parameter	☆(4) (15)
Bit 297+64*( n-1)	W/R	Forbidding power on of auxiliary heater	0: allow power of auxiliary heater; 1:forbid power on of auxiliary heater	Status parameter	☆(26 )
Bit 298+64*( n-1)	W/R	IDU power failure memory	0:standby 1:power failure memory	Status parameter	
Bit 299+64*( n-1)	W/R	Cancel filter cleaning reminder	0: no 1: yes	Status parameter	☆(24 )
Bit 300+64*( n-1)	W/R	Dry	0: off 1: on	Status parameter	☆(22 )
Bit 301+64*( n-1)	W/R	Sleep	0: off 1: on	Status parameter	☆(17 )
Bit 302+64*( n-1)	W/R	Quiet	0: off 1: on	Status parameter	☆(20 )
Bit 303+64*( n-1)	W/R	Ventilation	0: off 1: on	Status parameter	☆(23 )
Bit 304+64*( n-1)	W/R	Low-temperature dehumidification	0: cancel low-temperature dehumidification 1: start	Status parameter	☆(12 )
Bit	W/R	Shielding on	0: no shielding	Status parameter	☆(10)

305+64*(n-1)			1:shielding		)
Bit 306+64*(n-1)	W/R	Shielding off	0: no shielding 1:shielding	Status parameter	☆(10)
Bit 307+64*(n-1)	W/R	Shielding timer	0: no shielding 1: shielding	Status parameter	☆(25)
Bit 308+64*(n-1)	W/R	Setting 8℃ heating function	0: cancel 8℃ heating function 1: start 8℃ heating function	Status parameter	☆(11)
Bit 309+64*(n-1)	R	Reserved			
Bit 310+64*(n-1)	R	Reserved			
Bit 311+64*(n-1)	R	Reserved			
Bit 312+64*(n-1)	R	Reserved			
Bit 313+64*(n-1)	R	Reserved			
Bit 314+64*(n-1)	R	Reserved			
Bit 315+64*(n-1)	R	Master IDU/slave IDU	0: Slave IDU 1: Master IDU	Status parameter	☆(2)
Bit 316+64*(n-1)	R	Auxiliary electric heater of IDU	0: off 1: on	Status parameter	
Bit 317+64*(n-1)	R	Reserved			
Bit 318+64*(n-1)	R	Air outlet temperature sensor error	0: no 1: yes	Error parameter	
Bit 319+64*(n-1)	R	General error of indoor unit	0: no 1: yes	Error parameter	

n-1)						
...						
Bit 8416	W/R	Remote shielding of energy-saving function	0: no shielded 1: shielded	Status parameter		IDU 128 data
Bit 8417	W/R	Remote shielding temperature setting function	0: no shielded 1: shielded	Status parameter	☆(14)	
Bit 8418	W/R	Remote shielding of mode function	0: no shielded 1: shielded	Status parameter		
Bit 8419	W/R	Remote shielding of power on/power off function	0: no shielded 1: shielded	Status parameter	☆(10)	
Bit 8420	W/R	Remote locking function	0: unlocked 1: locked	Status parameter	☆(8)	
Bit 8421	W/R	Power supplied for IDUs in priority	0: no 1: yes	Status parameter	Electricity lacking mode of power supply system, power supplied for IDUs in priority	
Bit 8422	W/R	Up-down swing	0: off 1: on	Status parameter	☆(21)	
Bit 8423	W/R	Left-right swing	0: off 1: on	Status parameter	☆(21)	
Bit 8424	W/R	Energy saving setting	0: off 1: on	Status parameter	☆(4) (15)	
Bit 8425	W/R	Forbidding power on of auxiliary heater	0: allow power of auxiliary heater; 1: forbid power on of auxiliary heater	Status parameter	☆(26)	
Bit 8426	W/R	IDU power failure memory	0: standby 1: power failure memory	Status parameter		

Bit 8427	W/R	Cancel filter cleaning reminder	0: no 1: yes	Status parameter	☆(24)	
Bit 8428	W/R	Dry	0: off 1: on	Status parameter	☆(22)	
Bit 8429	W/R	Sleep	0: off 1: on	Status parameter	☆(17)	
Bit 8430	W/R	Quiet	0: off 1: on	Status parameter	☆(20)	
Bit 8431	W/R	Ventilation	0: off 1: on	Status parameter	☆(23)	
Bit 8432	W/R	Low-temperature dehumidification	0: cancel low-temperature dehumidification 1: start low-temperature dehumidification	Status parameter	☆(12)	
Bit 8433	W/R	Shielding on	0: no shielding 1: shielding	Status parameter	☆(10)	
Bit 8434	W/R	Shielding off	0: no shielding 1: shielding	Status parameter	☆(10)	
Bit 8435	W/R	Shielding timer	0: no shielding 1: shielding	Status parameter	☆(25)	
Bit 8436	W/R	Setting 8℃ heating function	0: cancel 8℃ heating function; 1: start 8℃ heating function	Status parameter	☆(11)	
Bit 8437	R	Reserved				
Bit 8438	R	Reserved				
Bit 8439	R	Reserved				
Bit 8440	R	Reserved				
Bit 8441	R	Reserved				
Bit 8442	R	Reserved				
Bit 8443	R	Master IDU/slave IDU	0: Slave IDU 1: Master IDU	Status parameter	☆(2)	
Bit 8444	R	Auxiliary electric heater of IDU	0: off 1: on	Status parameter		
Bit 8445	R	Reserved				
Bit 8446	R	Air outlet temperature sensor error	0: no 1: yes	Error parameter		
Bit 8447	R	General error of indoor unit	0: no 1: yes	Error parameter		
...						
Bit 8488	R	Communication error	0: no 1: yes	Error parameter		System 1 data
Bit 8489	R	Refrigerant loss protection	0: no 1: yes	Error parameter		

Bit 8490	R	Communication error between master control board and drive board	0: no 1: yes	Error parameter		
Bit 8491	R	Power phase sequence protection	0: no 1: yes	Error parameter		
Bit 8492	R	Start VIP power supply mode	0: no 1: yes	Status parameter		
Bit 8493	R	Unit debugging status	0: normal 1: debugging	Status parameter		
Bit 8494	R	System compressor or operation status	0: off 1: on	Status parameter		
Bit 8495	R	General error of outdoor unit	0: no 1: yes	Error parameter		
...						
Bit 8526	R	Read/write error of EEPROM(main board of the outdoor unit is poorly connected)	0: no 1: yes	Error parameter		
...						
Bit 8488+48* (m-1)	R	Communication error	0: no 1: yes	Error parameter		System m data
Bit 8489+48* (m-1)	R	Refrigerant loss protection	0: no 1: yes	Error parameter		
Bit 8490+48* (m-1)	R	Communication error between master control board and drive board	0: no 1: yes	Error parameter		
Bit 8491+48* (m-1)	R	Power phase sequence protection	0: no 1: yes	Error parameter		
Bit 8492+48* (m-1)	R	Start VIP power supply mode	0: no 1: yes	Status parameter		
Bit 8493+48* (m-1)	R	Unit debugging status	0: normal 1: debugging	Status parameter		
Bit 8494+48* (m-1)	R	System compressor operation status	0: off 1: on	Status parameter		
Bit 8495+48* (m-1)	R	General error of outdoor unit	0: no 1: yes	Error parameter		
...						

Bit 8526+48* (m-1)	R	Read/write error of EEPROM(main board of the outdoor unit is poorly connected)	0: no 1: yes	Error parameter		
...						
Bit 9208	R	Communication error	0: no 1: yes	Error parameter		System 16 data
Bit 9209	R	Refrigerant loss protection	0: no 1: yes	Error parameter		
Bit 9210	R	Communication error between master control board and drive board	0: no 1: yes	Error parameter		
Bit 9211	R	Power phase sequence protection	0: no 1: yes	Error parameter		
Bit 9212	R	Start VIP power supply mode	0: no 1: yes	Status parameter		
Bit 9213	R	Unit debugging status	0: normal 1: debugging	Status parameter		
Bit 9214	R	System compressor operation status	0: off 1: on	Status parameter		
Bit 9215	R	General error of outdoor unit	0: no 1: yes	Error parameter		
...						
Bit 9246	R	Read/write error of EEPROM(main board of the outdoor unit is poorly connected)	0: no 1: yes	Error parameter		
...						
Bit 9776	W/R	IDU on/off status	0: off 1: on	Status parameter		Subway IDU 1 parameter
Bit 9777	R	IDU error status	0: no 1: yes	Status parameter		
Bit 9778	R	Reserved				
Bit 9779	R	Reserved				
Bit 9780	R	Reserved				
Bit 9781	R	Reserved				
Bit 9782	R	Reserved				
Bit 9783	R	Reserved				
Bit 9776+(n-1)*8	W/R	IDU on/off status	0: off 1: on	Status parameter		Subway IDU n parameter
Bit 9777+(n-1)*8	R	IDU error status	0: no 1: yes	Status parameter		
Bit	R	Reserved				



9778+(n-1)*8						
Bit 9779+(n-1)*8	R	Reserved				
Bit 9780+(n-1)*8	R	Reserved				
Bit 9781+(n-1)*8	R	Reserved				
Bit 9782+(n-1)*8	R	Reserved				
Bit 9783+(n-1)*8	R	Reserved				
Bit 10792	W/R	IDU on/off status	0: off 1: on	Status parameter		Subway IDU 128 parameter
Bit 10793	R	IDU error status	0: no 1: yes	Status parameter		
Bit 10794	R	Reserved				
Bit 10795	R	Reserved				
Bit 10796	R	Reserved				
Bit 10797	R	Reserved				
Bit 10798	R	Reserved				
Bit 10799	R	Reserved				
Bit 10800	R/W	ODU on/off status/remote emergent stop	0: off 1: on	Status parameter	★ (27)	Subway System 1 data
Bit 10801	R	ODU error status	0: no 1: yes	Status parameter		
Bit 10802	R	Reserved				
Bit 10803	R	Reserved				
Bit 10804	R	Reserved				
Bit 10805	R	Reserved				
Bit 10806	R	Reserved				
Bit 10807	R	Reserved				
Bit 10800+(m-1)*8	R/W	ODU on/off status/remote emergent stop	0: off 1: on	Status parameter	★ (27)	Subway System m data
Bit 10801+(m-1)*8	R	ODU error status	0: no 1: yes	Status parameter		

Bit 10802+( m-1)*8	R	Reserved				
Bit 10803+( m-1)*8	R	Reserved				
Bit 10804+( m-1)*8	R	Reserved				
Bit 10805+( m-1)*8	R	Reserved				
Bit 10806+( m-1)*8	R	Reserved				
Bit 10807+( m-1)*8	R	Reserved				
Bit 10920	R/W	ODU on/off status/remote emergent stop	0: off 1: on	Status parameter	★ (27)	Subway System 16 data
Bit 10921	R	ODU error status	0: no 1: yes	Status parameter		
Bit 10922	R	Reserved				
Bit 10923	R	Reserved				
Bit 10924	R	Reserved				
Bit 10925	R	Reserved				
Bit 10926	R	Reserved				
Bit 10927	R	Reserved				

**3.Data and address distribution of analog quantity of fresh air unit: (Word 4200~Word 13159)**

Address	Access type(R-read only, W/R-read and write )	Data meaning	Range	Precision	Unit	Data type	Notice on BMS software design (data with ☆ mark) shall refer to 5.2	Remark
Word 4200	R	Return air and air inlet temperature	Monitor the displayed name: return air temperature 70~238(transmission value=actual temperature+100)	1	℃	Uint16		
Word 4201	R	IDU wired controller detection temperature	Wired controller detection temperature 80~200 (Transmission value=actual temperature+100)	1	℃	Uint16		
Word 4202	R	Fresh air outlet temperature sensor	Indoor air outlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
Word 4203	R	Fresh air inlet temperature sensor	Air inlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
Word 4204	R	Indoor relative humidity	Indoor relative humidity 120~190 (Transmission value=actual temperature+100)	1	%	Uint16		
Word 4205	R	Pollution degree of roughing efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16		
Word 4206	R	Pollution degree of high efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16		
Word 4207	R	Indoor air box 1: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
Word 4208	R	Indoor air box 2: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		

Word 4209	R	Indoor air box 3: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 4210	R	Indoor air box 4: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 4211	R	Indoor air box 5: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 4212	R	Indoor air box 1: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4213	R	Indoor air box 2: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4214	R	Indoor air box 3: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4215	R	Indoor air box 4: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4216	R	Indoor air box 5: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4217	R	Outdoor relative humidity	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4218	R	Pollution degree of roughing efficiency filter (replace)	Pollution degree of roughing efficiency filter (replace) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4219	R	Pollution degree of IFD filter (clean)	Pollution degree of IFD filter (clean) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 4220	R	Return air and air outlet temperature	Return air and air outlet temperature 70~238 (Transmission value=actual humidity+100)	1	℃	Uint16	
Word 4221	R	Valid mode of IDU	1: Valid mode; 0: Invalid mode; 0x00: Invalid; 0x01: Valid operation; 0x02: Valid linkage; 0x04: Valid automation;	/	/	Uint16	
Word 4222	R	Control mode of fresh air unit	Mode Range: 0~255 0: Invalid; 1: Operation; 2: Linkage; 3: Auto; Others are reserved.	/	/	Uint16	

Word 4223	R	Operation speed of fresh air unit	Speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	
Word 4224	R	Ambient temperature sensor sampling	Ambient temperature sensor sampling range: 0~10 0: Invalid; 1: Select the temperature sensor on air box 2: Select the temperature sensor on wired controller	/	/	Uint16	
Word 4225	R	Pollution grade of outdoor air	Pollution grade of outdoor air Range: 0~255 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: Severe pollution	/	/	Uint16	
Word 4226	R	Indoor air box 1: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 4227	R	Indoor air box 2: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	

Word 4228	R	Indoor air box 3: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 4229	R	Indoor air box 4: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 4230	R	Indoor air box 5: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 4231	R	Online status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Offline, not installed; 1: Online, installed; Remark: data of No.n means air box No.n is online.	/	/	Uint16	
Word 4232	R	Working status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Not working; 1: Working Remark: data of No.n means air box No.n	/	/	Uint16	
Word 4233	R	Operation mode of fresh air unit	Mode Range: 0~255 0: Invalid data; 1: Total heat mode; 2: Bypass mode; 3: Exhaust fan mode; 4: Low temperature mode; 5: Inner circulation 1; 6: Inner circulation 2	/	/	Uint16	

Word 4234	R	Operation speed of exhaust fan	Fan speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed; 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	
Word 4235	R	Positive and negative pressure setting	Range: 0~255 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode	/	/	Uint16	
Word 4236	R	Indoor air box 1: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 4237	R	Indoor air box 2: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 4238	R	Indoor air box 3: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 4239	R	Indoor air box 4: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 4240	R	Indoor air box 5: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 4241	R	Positive pressure speed setting	Positive pressure speed setting Remark: 0: Invalid; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5	/	/	Uint16	

Word 4242	R	Fresh air uni static pressure	Static pressure of fresh air unit Remark: 0:Invalid ; 1:0Pa 2:25Pa 3:50Pa 4:75Pa	/	/	Uint16	
Word 4243	R	Indoor air box 1: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 4244	R	Indoor air box 2: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 4245	R	Indoor air box 3: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 4246	R	Indoor air box 4: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 4247	R	Indoor air box 5: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 4248	R	Indoor air box 1: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 4249	R	Indoor air box 2: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 4250	R	Indoor air box 3: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 4251	R	Indoor air box 4: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 4252	R	Indoor air box 5: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 4253	W/R	Indoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4204
Word 4254	W/R	Max. outdoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4217
Word 4255	W/R	Control mode setting	Range: 0~255; 0: Invalid; 1:Operation 2: Linkage 3: Automation	/	/	Uint16	Read the setting value; status inquiry in Word 4222



Word 4256	W/R	} Fan speed setting	Range: 0~255; 0: Invalid data; 1: Auto fan speed; 2: Low speed; 3: Medium and low speed; 4: Medium speed; 5: Medium and high speed; 6: High speed;	/	/	Uint16	Read the setting value; status inquiry in Word 4223
Word 4257	W/R	Target value of indoor air quality grade	Target value of indoor air quality grade Range: 000~2 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good	/	/	Uint16	
Word 4258	W/R	Outdoor air pollution grade	Range of outdoor air pollution grade: 00~5 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Severe pollution; 6: Serious pollution	/	/	Uint16	
Word 4259	W/R	Software grouping No.1 【external version】	Range: 0~255	/	/	Uint16	
Word 4260	W/R	Software grouping No.2 【external version】	Range: 0~255	/	/	Uint16	
Word 4261	W/R	Software grouping No.3 【external version】	Range: 0~255	/	/	Uint16	
Word 4262	W/R	Software grouping No.4 【external version】	Range: 0~255	/	/	Uint16	
Word 4263	W/R	Software grouping No.5 【external version】	Range: 0~255	/	/	Uint16	
Word 4264	W/R	Positive and negative pressure setting	Range: 0~255; 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode;	/	/	Uint16	Read the setting value; status inquiry in Word 4235

Word 4265	W/R	Positive pressure setting	Range: 0~255; 0: Invalid data; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5;	/	/	Uint16	Read the setting value; status inquiry in Word 4241	
Word 4266	W/R	Static pressure setting of fresh air unit	Range: 0~255; 0:Invalid data; 1:0Pa; 2:25Pa; 3:50Pa; 4: 75Pa	/	/	Uint16	Read the setting value; status inquiry in Word 4242	
Word 4267	W/R	Setting for indoor air box switch	0: Air box is not working; 1: Air box is working	/	/	Uint16	No.n means air box No.n. 00001 means only air box No.1 is working .	
Word 4268	W/R	Indoor main air box setting	0: No main box; 1: Set it as the main box	/	/	Uint16	There's only one main air box. Several main air boxes can't be set.	
Word 4269		Reserved						
Word 70*(n-1) + 4200	R	Return air and air inlet temperature	Monitor the displayed name: return air temperature 70~238(transmission value=actual temperature+100)	1	℃	Uint16		IDU n data
Word 70*(n-1) + 4201	R	IDU wired controller detection temperature	Wired controller detection temperature 80~200 (Transmission value=actual temperature+100)	1	℃	Uint16		
Word 70*(n-1) + 4202	R	Fresh air outlet temperature sensor	Indoor air outlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		

Word 70*(n-1) + 4203	R	Fresh air inlet temperature sensor	Air inlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4204	R	Indoor relative humidity	Indoor relative humidity 120~190 (Transmission value=actual temperature+100)	1	%	Uint16	
Word 70*(n-1) + 4205	R	Pollution degree of roughing efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16	
Word 70*(n-1) + 4206	R	Pollution degree of high efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16	
Word 70*(n-1) + 4207	R	Indoor air box 1: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4208	R	Indoor air box 2: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4209	R	Indoor air box 3: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4210	R	Indoor air box 4: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4211	R	Indoor air box 5: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16	
Word 70*(n-1) + 4212	R	Indoor air box 1: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4213	R	Indoor air box 2: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4214	R	Indoor air box 3: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4215	R	Indoor air box 4: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4216	R	Indoor air box 5: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4217	R	Outdoor relative humidity	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	

Word 70*(n-1) + 4218	R	Pollution degree of roughing efficiency filter (replace)	Pollution degree of roughing efficiency filter (replace) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4219	R	Pollution degree of IFD filter (clean)	Pollution degree of IFD filter (clean) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 70*(n-1) + 4220	R	Return air and air outlet temperature	Return air and air outlet temperature 70~238 (Transmission value=actual humidity+100)	1	℃	Uint16	
Word 70*(n-1) + 4221	R	Valid mode of IDU	1: Valid mode; 0: Invalid mode; 0x00: Invalid; 0x01: Valid operation; 0x02: Valid linkage; 0x04: Valid automation;	/	/	Uint16	
Word 70*(n-1) + 4222	R	Control mode of fresh air unit	Mode Range: 0~255 0: Invalid; 1: Operation; 2: Linkage; 3: Auto; Others are reserved.	/	/	Uint16	
Word 70*(n-1) + 4223	R	Operation speed of fresh air unit	Speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	
Word 70*(n-1) + 4224	R	Ambient temperature sensor sampling	Ambient temperature sensor sampling range: 0~10 0: Invalid; 1: Select the temperature sensor on air box 2: Select the temperature sensor on wired controller	/	/	Uint16	

Word 70*(n-1) + 4225	R	Pollution grade of outdoor air	Pollution grade of outdoor air Range: 0~255 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: Severe pollution	/	/	Uint16	
Word 70*(n-1) + 4226	R	Indoor air box 1: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 70*(n-1) + 4227	R	Indoor air box 2: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 70*(n-1) + 4228	R	Indoor air box 3: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 70*(n-1) + 4229	R	Indoor air box 4: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 70*(n-1) + 4230	R	Indoor air box 5: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	

Word 70*(n-1) + 4231	R	Online status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Offline, not installed; 1: Online, installed; Remark: data of No.n means air box No.n is online.	/	/	Uint16	
Word 70*(n-1) + 4232	R	Working status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Not working; 1: Working Remark: data of No.n means air box No.n	/	/	Uint16	
Word 70*(n-1) + 4233	R	Operation mode of fresh air unit	Mode Range: 0~255 0: Invalid data; 1: Total heat mode; 2: Bypass mode; 3: Exhaust fan mode; 4: Low temperature mode; 5: Inner circulation 1; 6: Inner circulation 2	/	/	Uint16	
Word 70*(n-1) + 4234	R	Operation speed of exhaust fan	Fan speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed; 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	
Word 70*(n-1) + 4235	R	Positive and negative pressure setting	Range: 0~255 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode	/	/	Uint16	
Word 70*(n-1) + 4236	R	Indoor air box 1: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	

Word 70*(n-1) + 4237	R	Indoor air box 2: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 70*(n-1) + 4238	R	Indoor air box 3: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 70*(n-1) + 4239	R	Indoor air box 4: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 70*(n-1) + 4240	R	Indoor air box 5: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 70*(n-1) + 4241	R	Positive pressure speed setting	Positive pressure speed setting Remark: 0: Invalid; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5	/	/	Uint16	
Word 70*(n-1) + 4242	R	Fresh air uni static pressure	Static pressure of fresh air unit Remark: 0:Invalid ; 1:0Pa 2:25Pa 3:50Pa 4:75Pa	/	/	Uint16	
Word 70*(n-1) + 4243	R	Indoor air box 1: PM2.5 value	Transmission value=actual value	1	$\mu\text{g}/\text{m}^3$	Uint16	
Word 70*(n-1) + 4244	R	Indoor air box 2: PM2.5 value	Transmission value=actual value	1	$\mu\text{g}/\text{m}^3$	Uint16	
Word 70*(n-1) + 4245	R	Indoor air box 3: PM2.5 value	Transmission value=actual value	1	$\mu\text{g}/\text{m}^3$	Uint16	
Word 70*(n-1) + 4246	R	Indoor air box 4: PM2.5 value	Transmission value=actual value	1	$\mu\text{g}/\text{m}^3$	Uint16	
Word 70*(n-1) + 4247	R	Indoor air box 5: PM2.5 value	Transmission value=actual value	1	$\mu\text{g}/\text{m}^3$	Uint16	
Word 70*(n-1) + 4248	R	Indoor air box 1: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 70*(n-1) + 4249	R	Indoor air box 2: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 70*(n-1) + 4250	R	Indoor air box 3: CO2 value	Transmission value=actual value	1	ppm	Uint16	

Word 70*(n-1) + 4251	R	Indoor air box 4: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 70*(n-1) + 4252	R	Indoor air box 5: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 70*(n-1) + 4253	W/R	Indoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4204
Word 70*(n-1) + 4254	W/R	Max. outdoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4217
Word 70*(n-1) + 4255	W/R	Control mode setting	Range: 0~255; 0: Invalid; 1:Operation 2: Linkage 3: Automation	/	/	Uint16	Read the setting value; status inquiry in Word 4222
Word 70*(n-1) + 4256	W/R	} Fan speed setting	Range: 0~255; 0: Invalid data; 1: Auto fan speed; 2: Low speed; 3: Medium and low speed; 4: Medium speed; 5: Medium and high speed; 6: High speed;	/	/	Uint16	Read the setting value; status inquiry in Word 4223
Word 70*(n-1) + 4257	W/R	Target value of indoor air quality grade	Target value of indoor air quality grade Range: 000~2 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good	/	/	Uint16	
Word 70*(n-1) + 4258	W/R	Outdoor air pollution grade	Range of outdoor air pollution grade: 00~5 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Severe pollution; 6: Serious pollution	/	/	Uint16	



Word 70*(n-1) + 4259	W/R	Software grouping No.1 【external version】	Range: 0~255	/	/	Uint16	
Word 70*(n-1) + 4260	W/R	Software grouping No.2 【external version】	Range: 0~255	/	/	Uint16	
Word 70*(n-1) + 4261	W/R	Software grouping No.3 【external version】	Range: 0~255	/	/	Uint16	
Word 70*(n-1) + 4262	W/R	Software grouping No.4 【external version】	Range: 0~255	/	/	Uint16	
Word 70*(n-1) + 4263	W/R	Software grouping No.5 【external version】	Range: 0~255	/	/	Uint16	
Word 70*(n-1) + 4264	W/R	Positive and negative pressure setting	Range: 0~255; 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode;	/	/	Uint16	Read the setting value; status inquiry in Word 4235
Word 70*(n-1) + 4265	W/R	Positive pressure setting	Range: 0~255; 0: Invalid data; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5;	/	/	Uint16	Read the setting value; status inquiry in Word 4241
Word 70*(n-1) + 4266	W/R	Static pressure setting of fresh air unit	Range: 0~255; 0:Invalid data; 1:0Pa; 2:25Pa; 3:50Pa; 4: 75Pa	/	/	Uint16	Read the setting value; status inquiry in Word 4242
Word 70*(n-1) + 4267	W/R	Setting for indoor air box switch	0: Air box is not working; 1: Air box is working	/	/	Uint16	No.n means air box No.n. 00001 means only air box No.1 is working
Word 70*(n-1) + 4268	W/R	Indoor main air box setting	0: No main box; 1: Set it as the main box	/	/	Uint16	There's only one main air box. Several main air boxes can't be set.

Word 70*(n-1) + 4269		Reserved						
Word 13090	R	Return air and air inlet temperature	Monitor the displayed name: return air temperature 70~238(transmission value=actual temperature+100)	1	℃	Uint16		IDU 128 data
Word 13091	R	IDU wired controller detection temperature	Wired controller detection temperature 80~200 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13092	R	Fresh air outlet temperature sensor	Indoor air outlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13093	R	Fresh air inlet temperature sensor	Air inlet temperature 70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13094	R	Indoor relative humidity	Indoor relative humidity 120~190 (Transmission value=actual temperature+100)	1	%	Uint16		
WORD 13095	R	Pollution degree of roughing efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16		
WORD 13096	R	Pollution degree of high efficiency filter	Pollution degree of filter screen 100~200 (Transmission value=actual temperature+100)	1	%	Uint16		
WORD 13097	R	Indoor air box 1: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13098	R	Indoor air box 2: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13099	R	Indoor air box 3: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13100	R	Indoor air box 4: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13101	R	Indoor air box 5: temperature sensor	70~238 (Transmission value=actual temperature+100)	1	℃	Uint16		
WORD 13102	R	Indoor air box 1: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16		
WORD 13103	R	Indoor air box 2: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16		

WORD 13104	R	Indoor air box 3: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
WORD 13105	R	Indoor air box 4: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
WORD 13106	R	Indoor air box 5: humidity sensor	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
WORD 13107	R	Outdoor relative humidity	120~190 (Transmission value=actual humidity+100)	1	%	Uint16	
WORD 13108	R	Pollution degree of roughing efficiency filter (replace)	Pollution degree of roughing efficiency filter (replace) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
WORD 13109	R	Pollution degree of IFD filter (clean)	Pollution degree of IFD filter (clean) 100~200 (Transmission value=actual humidity+100)	1	%	Uint16	
Word 13110	R	Return air and air outlet temperature	Return air and air outlet temperature 70~238 (Transmission value=actual humidity+100)	1	℃	Uint16	
Word 13111	R	Valid mode of IDU	1: Valid mode; 0: Invalid mode; 0x00: Invalid; 0x01: Valid operation; 0x02: Valid linkage; 0x04: Valid automation;	/	/	Uint16	
Word 13112	R	Control mode of fresh air unit	Mode Range: 0~255 0: Invalid; 1: Operation; 2: Linkage; 3: Auto; Others are reserved.	/	/	Uint16	
Word 13113	R	Operation speed of fresh air unit	Speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	

Word 13114	R	Ambient temperature sensor sampling	Ambient temperature sensor sampling range: 0~10 0: Invalid; 1: Select the temperature sensor on air box 2: Select the temperature sensor on wired controller	/	/	Uint16	
Word 13115	R	Pollution grade of outdoor air	Pollution grade of outdoor air Range: 0~255 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: Severe pollution	/	/	Uint16	
Word 13116	R	Indoor air box 1: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 13117	R	Indoor air box 2: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 13118	R	Indoor air box 3: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	

Word 13119	R	Indoor air box 4: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 13120	R	Indoor air box 5: Air quality grade	Indoor air quality grade Range: 0~6 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Heavy pollution; 6: severe pollution	/	/	Uint16	
Word 13121	R	Online status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Offline, not installed; 1: Online, installed; Remark: data of No.n means air box No.n is online.	/	/	Uint16	
Word 13122	R	Working status of indoor air box	Indoor air box LED indicator Range: 0~00011111 0: Not working; 1: Working Remark: data of No.n means air box No.n	/	/	Uint16	
Word 13123	R	Operation mode of fresh air unit	Mode Range: 0~255 0: Invalid data; 1: Total heat mode; 2: Bypass mode; 3: Exhaust fan mode; 4: Low temperature mode; 5: Inner circulation 1; 6: Inner circulation 2	/	/	Uint16	

Word 13124	R	Operation speed of exhaust fan	Fan speed Range: 0~255 0: Invalid data; 1: The fan stops; 2: Ultra-low speed; 3: Low speed; 4: Medium and low speed; 5: Medium speed; 6: Medium and high speed; 7: High speed; 8: Ultra-high speed; 9: Quiet speed R1; 10: Quiet speed R2; 11: Quiet speed R3	/	/	Uint16	
Word 13125	R	Positive and negative pressure setting	Range: 0~255 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode	/	/	Uint16	
Word 13126	R	Indoor air box 1: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 13127	R	Indoor air box 2: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 13128	R	Indoor air box 3: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 13129	R	Indoor air box 4: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 13130	R	Indoor air box 5: dial code address	Range: 0~8(Transmission value=actual value+1; 0 is the invalid data)	/	/	Uint16	
Word 13131	R	Positive pressure speed setting	Positive pressure speed setting Remark: 0: Invalid; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5	/	/	Uint16	

Word 13132	R	Fresh air uni static pressure	Static pressure of fresh air unit Remark: 0:Invalid ; 1:0Pa 2:25Pa 3:50Pa 4:75Pa	/	/	Uint16	
Word 13133	R	Indoor air box 1: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 13134	R	Indoor air box 2: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 13135	R	Indoor air box 3: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 13136	R	Indoor air box 4: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 13137	R	Indoor air box 5: PM2.5 value	Transmission value=actual value	1	µg/m <sup>3</sup>	Uint16	
Word 13138	R	Indoor air box 1: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 13139	R	Indoor air box 2: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 13140	R	Indoor air box 3: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 13141	R	Indoor air box 4: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 13142	R	Indoor air box 5: CO2 value	Transmission value=actual value	1	ppm	Uint16	
Word 13143	W/R	Indoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4204
Word 13144	W/R	Max. outdoor relative humidity setting	Range: 1~100% Transmission value=actual value 0: Invalid data	1	%	Uint16	Read the setting value; status inquiry in Word 4217
Word 13145	W/R	Control mode setting	Range: 0~255; 0: Invalid; 1:Operation 2: Linkage 3: Automation	/	/	Uint16	Read the setting value; status inquiry in Word 4222

Word 13146	W/R	} Fan speed setting	Range: 0~255; 0: Invalid data; 1: Auto fan speed; 2: Low speed; 3: Medium and low speed; 4: Medium speed; 5: Medium and high speed; 6: High speed;	/	/	Uint16	Read the setting value; status inquiry in Word 4223
Word 13147	W/R	Target value of indoor air quality grade	Target value of indoor air quality grade Range: 000~2 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good	/	/	Uint16	
Word 13148	W/R	Outdoor air pollution grade	Range of outdoor air pollution grade: 00~5 (Transmission value=actual temperature) 0: Invalid; 1: Excellent; 2: Good; 3: Mild pollution; 4: Medium pollution; 5: Severe pollution; 6: Serious pollution	/	/	Uint16	
Word 13149	W/R	Software grouping No.1 【external version】	Range: 0~255	/	/	Uint16	
Word 13150	W/R	Software grouping No.2 【external version】	Range: 0~255	/	/	Uint16	
Word 13151	W/R	Software grouping No.3 【external version】	Range: 0~255	/	/	Uint16	
Word 13152	W/R	Software grouping No.4 【external version】	Range: 0~255	/	/	Uint16	
Word 13133	W/R	Software grouping No.5 【external version】	Range: 0~255	/	/	Uint16	
Word 13154	W/R	Positive and negative pressure setting	Range: 0~255; 0: Invalid data; 1: Normal fan speed; 2: Positive pressure mode; 3: Negative pressure mode;	/	/	Uint16	Read the setting value; status inquiry in Word 4235



Word 13155	W/R	Positive pressure setting	Range: 0~255; 0: Invalid data; 1: Speed 0; 2: Speed 1; 3: Speed 2; 4: Speed 3; 5: Speed 4; 6: Speed 5;	/	/	Uint16	Read the setting value; status inquiry in Word 4241
Word 13156	W/R	Static pressure setting of fresh air unit	Range: 0~255; 0:Invalid data; 1:0Pa; 2:25Pa; 3:50Pa; 4: 75Pa	/	/	Uint16	Read the setting value; status inquiry in Word 4242
Word 13157	W/R	Setting for indoor air box switch	0: Air box is not working; 1: Air box is working	/	/	Uint16	No.n means air box No.n. 00001 means only air box No.1 is working .
Word 13158	W/R	Indoor main air box setting	0: No main box; 1: Set it as the main box	/	/	Uint16	There's only one main air box. Several main air boxes can't be set.
Word 13159		Reserved					

## 4. (Bit 11200~Bit 27583) Data and address distribution of switching value of fresh air unit

Address	Access type(R-read only W/R-read and write)	Data meaning	Range	Parameter type	Notice on BMS software design (data with ☆ mark) shall refer to 5.2	Remark
Bit 11200	R	Wired controller ambient temperature sensor error	1:Error 0:Normal	Error parameter		IDU 1 data
Bit 11201	R	Errors of several main wired controllers	1:Error 0:Normal	Error parameter		
Bit 11202	R	Completion status of IDU resuming to the ex-factory defaulted value	0 Not finished 1 Finished	Error parameter		
Bit 11203	R	Conflict of IDU project No.	1:Error 0:Normal	Error parameter		
Bit 11204	R	Main communication error of IDU	1:Error 0:Normal	Error parameter		
Bit 11205	R	Main communication error of IDU and ODU	1:Error 0:Normal	Error parameter		
Bit 11206	R	Communication error of IDU and wired controller	1:Error 0:Normal	Error parameter		
Bit 11207	R	RF Communication error	1:Error 0:Normal	Error parameter		
Bit 11208	R	Poor indoor circuit board	1:Error 0:Normal	Error parameter		
Bit 11209	R	One wired controller controls multiple indoor units, IDU quantity is inconsistent (HBS network)	1:Error 0:Normal	Error parameter		
Bit 11210	R	One wired controller controls multiple indoor units, IDU series is inconsistent (HBS network)	1:Error 0:Normal	Error parameter		
Bit 11211	R	HBS current leakage error	1:Error 0:Normal	Error parameter		
Bit 11212	R	HBS no voltage error	1:Error 0:Normal	Error parameter		
Bit 11213	R	HBS power reverse error	1:Error 0:Normal	Error parameter		
Bit 11214	R	HBS power detection error	1:Error 0:Normal	Error parameter		
Bit 11215	R	Wired controller circuit board error	1:Error 0:Normal	Error parameter		
Bit 11216	R	IDU network address error	1:Error 0:Normal	Error parameter		
Bit 11217	R	IDU address conflict	1:Error 0:Normal	Error parameter		
Bit 11218	R	Jumper cap error	1:Error 0:Normal	Error parameter		
Bit 11219	R	(Airflow volume) dial code setting error	1:Error 0:Normal	Error parameter		

Bit 11220	R	Fresh air outlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 11221	R	Fresh air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 11222	R	Indoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11223	R	Anti-freezing protection	1:Error 0:Normal	Error parameter	
Bit 11224	R	Communication error between IDU and indoor box 1	1:Error 0:Normal	Error parameter	★ (36)
Bit 11225	R	Communication error between IDU and indoor box 2	1:Error 0:Normal	Error parameter	★ (36)
Bit 11226	R	Communication error between IDU and indoor box 3	1:Error 0:Normal	Error parameter	★ (36)
Bit 11227	R	Communication error between IDU and indoor box 4	1:Error 0:Normal	Error parameter	★ (36)
Bit 11228	R	Communication error between IDU and indoor box 5	1:Error 0:Normal	Error parameter	★ (36)
Bit 11229	R	Indoor fan protection	1:Error 0:Normal	Error parameter	
Bit 11230	R	Return air and air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 11231	R	Outdoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11232	R	IFD error	1:Error 0:Normal	Error parameter	
Bit 11233	R	Power current protection	1:Error 0:Normal	Error parameter	
Bit 11234	R	Return air and air outlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 11235	R	High liquid level error	1:Error 0:Normal	Error parameter	
Bit 11236	R	Low liquid level error	1:Error 0:Normal	Error parameter	
Bit 11237	R	Communication error between IDU and air box	1:Error 0:Normal	Error parameter	
Bit 11238	R	Indoor air box 1: main error	1:Error 0:Normal	Error parameter	
Bit 11239	R	Indoor air box 2: main error of sensor	1:Error 0:Normal	Error parameter	
Bit 11240	R	Indoor air box 3: main error	1:Error 0:Normal	Error parameter	
Bit 11241	R	Indoor air box 4: main error	1:Error 0:Normal	Error parameter	
Bit 11242	R	Indoor air box 5: main error	1:Error 0:Normal	Error parameter	
Bit 11243	R	Indoor air box 1: PM2.5 sensor error	1:Error 0:Normal	Error parameter	

Bit 11244	R	Indoor air box 2: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 11245	R	Indoor air box 3: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 11246	R	Indoor air box 4: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 11247	R	Indoor air box 5: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 11248	R	Indoor air box 1: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 11249	R	Indoor air box 2: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 11250	R	Indoor air box 3: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 11251	R	Indoor air box 4: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 11252	R	Indoor air box 5: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 11253	R	Indoor air box 1: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11254	R	Indoor air box 2: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11255	R	Indoor air box 3: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11256	R	Indoor air box 4: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11257	R	Indoor air box 5: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 11258	R	Indoor air box 1: internal communication error	1:Error 0:Normal	Error parameter	
Bit 11259	R	Indoor air box 2: internal communication error	1:Error 0:Normal	Error parameter	
Bit 11260	R	Indoor air box 3: internal communication error	1:Error 0:Normal	Error parameter	
Bit 11261	R	Indoor air box 4: internal communication error	1:Error 0:Normal	Error parameter	
Bit 11262	R	Indoor air box 5: internal communication error	1:Error 0:Normal	Error parameter	
Bit 11263	R	Turbo fan speed function status	1:ON 0:OFF	Status parameter	

Bit 11264	R	IDU online test status	0 N/A 1 Online test	Status parameter	
Bit 11265	R	Remote shielding mode	1 Shielded 0 No shielding	Status parameter	
Bit 11266	R	Remote shielding ON/OFF	1 Shielded 0 No shielding	Status parameter	
Bit 11267	R	Remote lock function	1 Shielded 0 No shielding	Status parameter	
Bit 11268	R	Shielding ON	1 Shielded 0 No shielding	Status parameter	
Bit 11269	R	Shielding OFF	1 Shielded 0 No shielding	Status parameter	
Bit 11270	R	Timer shielding	1 Shielded 0 No shielding	Status parameter	
Bit 11271	R	Auxiliary electrical heater	1 Auxiliary heating ON 0 Auxiliary heating OFF	Status parameter	Reserved function
Bit 11272	R	Health	1:ON 0:OFF	Status parameter	Reserved function
Bit 11273	R	Humidifier	1:ON 0:OFF	Status parameter	Reserved function
Bit 11274	R	Electrostatic dedusting	1:ON 0:OFF	Status parameter	Reserved function
Bit 11275	R	Water makeup valve	1:ON 0:OFF	Status parameter	Reserved function
Bit 11276	R	IDU memory	1:Reset 0:Standby	Status parameter	
Bit 11277	R	Filter dirty cleaning alarm	0 N/A 1 Filter cleaning	Status parameter	
Bit 11278	R	Filter dirty replacement alarm	0 N/A 1 Replacement hint	Status parameter	
Bit 11279	R	Pressure boost fan	1:ON 0:OFF	Status parameter	Reserved function
Bit 11280	R	Shunt valve	1:ON 0:OFF	Status parameter	
Bit 11281	R	Low temperature valve	1:ON 0:OFF	Status parameter	
Bit 11282	R	Decryption status of fresh air unit	0: Decrypted 1: Not decrypted	Status parameter	
Bit 11283	R	Indoor purification valve	1:ON 0:OFF	Status parameter	
Bit 11284	R	IFD filter screen cleaning alarm	0 No 1 Replacement alarm	Status parameter	
Bit 11285	R	High efficiency filter screen replacement alarm	0 No 1 Replacement alarm	Status parameter	
Bit 11286	R	Set indoor purification manually	1:ON 0:OFF	Status parameter	
Bit 11287	R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 11288	R	Free cooling	1:ON 0:OFF	Status parameter	
Bit 11289	R	Free cooling at nighttime	1:ON 0:OFF	Status parameter	

Bit 11290	W/R	Startup/shutdown setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11320
Bit 11291	W/R	Turbo fan speed function setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11263
Bit 11292	W/R	Long distance shielding control mode function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 11293	W/R	Long distance shielding ON/OFF function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 11294	W/R	Long distance lock function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11267
Bit 11295	W/R	Shielding timer	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11270
Bit 11296	W/R	Shielding ON	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11268
Bit 11297	W/R	Shielding OFF	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11269
Bit 11298	W/R	Cancel filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	

Bit 11299	W/R	Cancel filter replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 11300	W/R	(Status setting after all IDUs are energized) IDU memory	1 Resume 0 Standby	Status parameter	Read the setting value; status inquiry in Bit 11276
Bit 11301	W/R	Health function forbidden	0: Allowed 1: Forbidden	Status parameter	Reserved function
Bit 11302	W	Command the IDU to clear engineering number	1 Clear 0 No requirement	Status parameter	Read the setting value; status inquire in Bit 11203 (solving the engineering No. conflict)
Bit 11303	W/R	Cancel IFD filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 11304	W/R	Cancel high efficiency filter screen replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	

Bit 11305	W/R	Set indoor purification manually	1:ON 0:OFF	Status parameter	Read the setting value: status inquiry in Bit 11286
Bit 11306	W/R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 11307	W/R	Auto control method setting	1 Energy saving 0 Comfort	Status parameter	★ (35)
Bit 11308	W/R	Humidification function setting	1:ON 0:OFF	Status parameter	Reserved function
Bit 11309		Reserved			
Bit 11310		Reserved			
Bit 11311		Reserved			
Bit 11312		Reserved			
Bit 11313		Reserved			
Bit 11314		Reserved			
Bit 11315		Reserved			
Bit 11316		Reserved			
Bit 11317		Reserved			
Bit 11318		Reserved			
Bit 11319	R	IDU error	1:Error 0:Normal	Error parameter	
Bit 11320	R	ON/OFF status	1:ON 0:OFF	Status parameter	
...					
Bit 11327		Reserved			
Bit 128*(n-1) + 11200	R	Wired controller ambient temperature sensor error	1:Error 0:Normal	Error parameter	IDU n data
Bit 128*(n-1) + 11201	R	Errors of several main wired controllers	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11202	R	Completion status of IDU resuming to the ex-factory defaulted value	0 Not finished 1 Finished	Error parameter	
Bit 128*(n-1) + 11203	R	Conflict of IDU project No.	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11204	R	Main communication error of IDU	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11205	R	Main communication error of IDU and ODU	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11206	R	Communication error of IDU and wired controller	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11207	R	RF Communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11208	R	Poor indoor circuit board	1:Error 0:Normal	Error parameter	



Bit 128*(n-1) + 11209	R	One wired controller controls multiple indoor units, IDU quantity is inconsistent (HBS network)	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11210	R	One wired controller controls multiple indoor units, IDU series is inconsistent (HBS network)	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11211	R	HBS current leakage error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11212	R	HBS no voltage error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11213	R	HBS power reverse error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11214	R	HBS power detection error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11215	R	Wired controller circuit board error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11216	R	IDU network address error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11217	R	IDU address conflict	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11218	R	Jumper cap error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11219	R	(Airflow volume) dial code setting error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11220	R	Fresh air outlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11221	R	Fresh air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11222	R	Indoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11223	R	Anti-freezing protection	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11224	R	Communication error between IDU and indoor box 1	1:Error 0:Normal	Error parameter	★ (36)
Bit 128*(n-1) + 11225	R	Communication error between IDU and indoor box 2	1:Error 0:Normal	Error parameter	★ (36)
Bit 128*(n-1) + 11226	R	Communication error between IDU and indoor box 3	1:Error 0:Normal	Error parameter	★ (36)
Bit 128*(n-1) + 11227	R	Communication error between IDU and indoor box 4	1:Error 0:Normal	Error parameter	★ (36)
Bit 128*(n-1) + 11228	R	Communication error between IDU and indoor box 5	1:Error 0:Normal	Error parameter	★ (36)

Bit 128*(n-1) + 11229	R	Indoor fan protection	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11230	R	Return air and air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11231	R	Outdoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11232	R	IFD error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11233	R	Power current protection	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11234	R	Return air and air outlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11235	R	High liquid level error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11236	R	Low liquid level error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11237	R	Communication error between IDU and air box	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11238	R	Indoor air box 1: main error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11239	R	Indoor air box 2: main error of sensor	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11240	R	Indoor air box 3: main error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11241	R	Indoor air box 4: main error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11242	R	Indoor air box 5: main error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11243	R	Indoor air box 1: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11244	R	Indoor air box 2: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11245	R	Indoor air box 3: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11246	R	Indoor air box 4: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11247	R	Indoor air box 5: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11248	R	Indoor air box 1: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11249	R	Indoor air box 2: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11250	R	Indoor air box 3: CO2 sensor error	1:Error 0:Normal	Error parameter	

Bit 128*(n-1) + 11251	R	Indoor air box 4: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11252	R	Indoor air box 5: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11253	R	Indoor air box 1: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11254	R	Indoor air box 2: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11255	R	Indoor air box 3: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11256	R	Indoor air box 4: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11257	R	Indoor air box 5: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11258	R	Indoor air box 1: internal communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11259	R	Indoor air box 2: internal communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11260	R	Indoor air box 3: internal communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11261	R	Indoor air box 4: internal communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11262	R	Indoor air box 5: internal communication error	1:Error 0:Normal	Error parameter	
Bit 128*(n-1) + 11263	R	Turbo fan speed function status	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11264	R	IDU online test status	0 N/A 1 Online test	Status parameter	
Bit 128*(n-1) + 11265	R	Remote shielding mode	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11266	R	Remote shielding ON/OFF	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11267	R	Remote lock function	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11268	R	Shielding ON	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11269	R	Shielding OFF	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11270	R	Timer shielding	1 Shielded 0 No shielding	Status parameter	
Bit 128*(n-1) + 11271	R	Auxiliary electrical heater	1 Auxiliary heating ON 0 Auxiliary heating OFF	Status parameter	Reserved function

Bit 128*(n-1) + 11272	R	Health	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11273	R	Humidifier	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11274	R	Electrostatic dedusting	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11275	R	Water makeup valve	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11276	R	IDU memory	1:Reset 0:Standby	Status parameter	
Bit 128*(n-1) + 11277	R	Filter dirty cleaning alarm	0 N/A 1 Filter cleaning	Status parameter	
Bit 128*(n-1) + 11278	R	Filter dirty replacement alarm	0 N/A 1 Replacement hint	Status parameter	
Bit 128*(n-1) + 11279	R	Pressure boost fan	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11280	R	Shunt valve	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11281	R	Low temperature valve	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11282	R	Decryption status of fresh air unit	0: Decrypted 1: Not decrypted	Status parameter	
Bit 128*(n-1) + 11283	R	Indoor purification valve	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11284	R	IFD filter screen cleaning alarm	0 No 1 Replacement alarm	Status parameter	
Bit 128*(n-1) + 11285	R	High efficiency filter screen replacement alarm	0 No 1 Replacement alarm	Status parameter	
Bit 128*(n-1) + 11286	R	Set indoor purification manually	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11287	R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11288	R	Free cooling	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11289	R	Free cooling at nighttime	1:ON 0:OFF	Status parameter	
Bit 128*(n-1) + 11290	W/R	Startup/shutdown setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11320
Bit 128*(n-1) + 11291	W/R	Turbo fan speed function setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11263

Bit 128*(n-1) + 11292	W/R	Long distance shielding control mode function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 128*(n-1) + 11293	W/R	Long distance shielding ON/OFF function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 128*(n-1) + 11294	W/R	Long distance lock function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11267
Bit 128*(n-1) + 11295	W/R	Shielding timer	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11270
Bit 128*(n-1) + 11296	W/R	Shielding ON	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11268
Bit 128*(n-1) + 11297	W/R	Shielding OFF	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11269
Bit 128*(n-1) + 11298	W/R	Cancel filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 128*(n-1) + 11299	W/R	Cancel filter replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 128*(n-1) + 11300	W/R	(Status setting after all IDUs are energized) IDU memory	1 Resume 0 Standby	Status parameter	Read the setting value; status inquiry in Bit 11276
Bit 128*(n-1) + 11301	W/R	Health function forbidden	0: Allowed 1: Forbidden	Status parameter	Reserved function

Bit 128*(n-1) + 11302	W	Command the IDU to clear engineering number	1 Clear 0 No requirement	Status parameter	Read the setting value; status inquire in Bit 11203 (solving the engineering No. conflict)
Bit 128*(n-1) + 11303	W/R	Cancel IFD filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 128*(n-1) + 11304	W/R	Cancel high efficiency filter screen replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 128*(n-1) + 11305	W/R	Set indoor purification manually	1:ON 0:OFF	Status parameter	Read the setting value: status inquiry in Bit 11286
Bit 128*(n-1) + 11306	W/R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11307	W/R	Auto control method setting	1 Energy saving 0 Comfort	Status parameter	★ (35)
Bit 128*(n-1) + 11308	W/R	Humidification function setting	1:ON 0:OFF	Status parameter	Reserved function
Bit 128*(n-1) + 11309		Reserved			
Bit 128*(n-1) + 11310		Reserved			
Bit 128*(n-1) + 11311		Reserved			
Bit 128*(n-1) + 11312		Reserved			
Bit 128*(n-1) + 11313		Reserved			
Bit 128*(n-1) + 11314		Reserved			
Bit 128*(n-1) + 11315		Reserved			

Bit 128*(n-1) + 11316		Reserved				
Bit 128*(n-1) + 11317		Reserved				
Bit 128*(n-1) + 11318		Reserved				
Bit 128*(n-1) + 11319	R	IDU error	1:Error 0:Normal	Error parameter		
Bit 128*(n-1) + 11320	R	ON/OFF status	1:ON 0:OFF	Status parameter		
...						
Bit 128*(n-1) + 11327		Reserved				
IDU 128 data						
Bit 27456	R	Wired controller ambient temperature sensor error	1:Error 0:Normal	Error parameter		
Bit 27457	R	Errors of several main wired controllers	1:Error 0:Normal	Error parameter		
Bit 27458	R	Completion status of IDU resuming to the ex-factory defaulted value	0 Not finished 1 Finished	Error parameter		
Bit 27459	R	Conflict of IDU project No.	1:Error 0:Normal	Error parameter		
Bit 27460	R	Main communication error of IDU	1:Error 0:Normal	Error parameter		
Bit 27461	R	Main communication error of IDU and ODU	1:Error 0:Normal	Error parameter		
Bit 27462	R	Communication error of IDU and wired controller	1:Error 0:Normal	Error parameter		
Bit 27463	R	RF Communication error	1:Error 0:Normal	Error parameter		
Bit 27464	R	Poor indoor circuit board	1:Error 0:Normal	Error parameter		
Bit 27465	R	One wired controller controls multiple indoor units, IDU quantity is inconsistent (HBS network)	1:Error 0:Normal	Error parameter		
Bit 27466	R	One wired controller controls multiple indoor units, IDU series is inconsistent (HBS network)	1:Error 0:Normal	Error parameter		
Bit 27467	R	HBS current leakage error	1:Error 0:Normal	Error parameter		
Bit 27468	R	HBS no voltage error	1:Error 0:Normal	Error parameter		
Bit 27469	R	HBS power reverse error	1:Error 0:Normal	Error parameter		
Bit 27470	R	HBS power detection error	1:Error 0:Normal	Error parameter		
Bit 27471	R	Wired controller circuit board error	1:Error 0:Normal	Error parameter		
Bit 27472	R	IDU network address error	1:Error 0:Normal	Error parameter		
Bit 27473	R	IDU address conflict	1:Error 0:Normal	Error parameter		
Bit 27474	R	Jumper cap error	1:Error 0:Normal	Error parameter		
Bit 27475	R	(Airflow volume) dial code setting error	1:Error 0:Normal	Error parameter		
Bit 27476	R	Fresh air outlet temperature sensor error	1:Error 0:Normal	Error parameter		

Bit 27477	R	Fresh air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 27478	R	Indoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27479	R	Anti-freezing protection	1:Error 0:Normal	Error parameter	
Bit 27480	R	Communication error between IDU and indoor box 1	1:Error 0:Normal	Error parameter	★ (36)
Bit 27481	R	Communication error between IDU and indoor box 2	1:Error 0:Normal	Error parameter	★ (36)
Bit 27482	R	Communication error between IDU and indoor box 3	1:Error 0:Normal	Error parameter	★ (36)
Bit 27483	R	Communication error between IDU and indoor box 4	1:Error 0:Normal	Error parameter	★ (36)
Bit 27484	R	Communication error between IDU and indoor box 5	1:Error 0:Normal	Error parameter	★ (36)
Bit 27485	R	Indoor fan protection	1:Error 0:Normal	Error parameter	
Bit 27486	R	Return air and air inlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 27487	R	Outdoor humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27488	R	IFD error	1:Error 0:Normal	Error parameter	
Bit 27489	R	Power current protection	1:Error 0:Normal	Error parameter	
Bit 27490	R	Return air and air outlet temperature sensor error	1:Error 0:Normal	Error parameter	
Bit 27491	R	High liquid level error	1:Error 0:Normal	Error parameter	
Bit 27492	R	Low liquid level error	1:Error 0:Normal	Error parameter	
Bit 27493	R	Communication error between IDU and air box	1:Error 0:Normal	Error parameter	
Bit 27494	R	Indoor air box 1: main error	1:Error 0:Normal	Error parameter	
Bit 27495	R	Indoor air box 2: main error of sensor	1:Error 0:Normal	Error parameter	
Bit 27496	R	Indoor air box 3: main error	1:Error 0:Normal	Error parameter	
Bit 27497	R	Indoor air box 4: main error	1:Error 0:Normal	Error parameter	
Bit 27498	R	Indoor air box 5: main error	1:Error 0:Normal	Error parameter	
Bit 27499	R	Indoor air box 1: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 27500	R	Indoor air box 2: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 27501	R	Indoor air box 3: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 27502	R	Indoor air box 4: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 27503	R	Indoor air box 5: PM2.5 sensor error	1:Error 0:Normal	Error parameter	
Bit 27504	R	Indoor air box 1: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 27505	R	Indoor air box 2: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 27506	R	Indoor air box 3: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 27507	R	Indoor air box 4: CO2 sensor error	1:Error 0:Normal	Error parameter	
Bit 27508	R	Indoor air box 5: CO2 sensor error	1:Error 0:Normal	Error parameter	



Bit 27509	R	Indoor air box 1: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27510	R	Indoor air box 2: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27511	R	Indoor air box 3: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27512	R	Indoor air box 4: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27513	R	Indoor air box 5: temperature and humidity sensor error	1:Error 0:Normal	Error parameter	
Bit 27514	R	Indoor air box 1: internal communication error	1:Error 0:Normal	Error parameter	
Bit 27515	R	Indoor air box 2: internal communication error	1:Error 0:Normal	Error parameter	
Bit 27516	R	Indoor air box 3: internal communication error	1:Error 0:Normal	Error parameter	
Bit 27517	R	Indoor air box 4: internal communication error	1:Error 0:Normal	Error parameter	
Bit 27518	R	Indoor air box 5: internal communication error	1:Error 0:Normal	Error parameter	
Bit 27519	R	Turbo fan speed function status	1:ON 0:OFF	Status parameter	
Bit 27520	R	IDU online test status	0 N/A 1 Online test	Status parameter	
Bit 27521	R	Remote shielding mode	1 Shielded 0 No shielding	Status parameter	
Bit 27522	R	Remote shielding ON/OFF	1 Shielded 0 No shielding	Status parameter	
Bit 27523	R	Remote lock function	1 Shielded 0 No shielding	Status parameter	
Bit 27524	R	Shielding ON	1 Shielded 0 No shielding	Status parameter	
Bit 27525	R	Shielding OFF	1 Shielded 0 No shielding	Status parameter	
Bit 27526	R	Timer shielding	1 Shielded 0 No shielding	Status parameter	
Bit 27527	R	Auxiliary electrical heater	1 Auxiliary heating ON 0 Auxiliary heating OFF	Status parameter	Reserved function
Bit 27528	R	Health	1:ON 0:OFF	Status parameter	Reserved function
Bit 27529	R	Humidifier	1:ON 0:OFF	Status parameter	Reserved function
Bit 27530	R	Electrostatic dedusting	1:ON 0:OFF	Status parameter	Reserved function
Bit 27531	R	Water makeup valve	1:ON 0:OFF	Status parameter	Reserved function
Bit 27532	R	IDU memory	1:Reset 0:Standby	Status parameter	
Bit 27533	R	Filter dirty cleaning alarm	0 N/A 1 Filter cleaning	Status parameter	
Bit 27534	R	Filter dirty replacement alarm	0 N/A 1 Replacement hint	Status parameter	
Bit 27535	R	Pressure boost fan	1:ON 0:OFF	Status parameter	Reserved function
Bit 27536	R	Shunt valve	1:ON 0:OFF	Status parameter	
Bit 27537	R	Low temperature valve	1:ON 0:OFF	Status parameter	
Bit 27538	R	Decryption status of fresh air unit	0: Decrypted 1: Not decrypted	Status parameter	

Bit 27539	R	Indoor purification valve	1:ON 0:OFF	Status parameter	
Bit 27540	R	IFD filter screen cleaning alarm	0 No 1 Replacement alarm	Status parameter	
Bit 27541	R	High efficiency filter screen replacement alarm	0 No 1 Replacement alarm	Status parameter	
Bit 27542	R	Set indoor purification manually	1:ON 0:OFF	Status parameter	
Bit 27543	R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 27544	R	Free cooling	1:ON 0:OFF	Status parameter	
Bit 27545	R	Free cooling at nighttime	1:ON 0:OFF	Status parameter	
Bit 27546	W/R	Startup/shutdown setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11320
Bit 27547	W/R	Turbo fan speed function setting	1:ON 0:OFF	Status parameter	Read the setting value; status inquiry in Bit 11263
Bit 27548	W/R	Long distance shielding control mode function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 27549	W/R	Long distance shielding ON/OFF function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11265
Bit 27550	W/R	Long distance lock function	1 Shielded 0 No shielding	Status parameter	Read the setting value; status inquiry in Bit 11267
Bit 27551	W/R	Shielding timer	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11270
Bit 27552	W/R	Shielding ON	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11268
Bit 27553	W/R	Shielding OFF	1 Shielded 0 No shielding (not disposed)	Status parameter	Read the setting value; status inquiry in Bit 11269
Bit 27554	W/R	Cancel filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment)	Status parameter	

			debugging and remote control monitoring instruction, control IDU clearing)		
Bit 27555	W/R	Cancel filter replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 27556	W/R	(Status setting after all IDUs are energized) IDU memory	1 Resume 0 Standby	Status parameter	Read the setting value; status inquiry in Bit 11276
Bit 27557	W/R	Health function forbidden	0: Allowed 1: Forbidden	Status parameter	Reserved function
Bit 27558	W	Command the IDU to clear engineering number	1 Clear 0 No requirement	Status parameter	Read the setting value; status inquire in Bit 11203 (solving the engineering No. conflict)
Bit 27559	W/R	Cancel IFD filter cleaning alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 27560	W/R	Cancel high efficiency filter screen replacement alarm	0: No 1: Command the IDU to clear (single control order, equipment debugging and remote control monitoring instruction, control IDU clearing)	Status parameter	
Bit 27561	W/R	Set indoor purification manually	1:ON 0:OFF	Status parameter	Read the setting value: status inquiry in Bit 11286
Bit 27562	W/R	Energy saving mode	1:ON 0:OFF	Status parameter	Reserved function
Bit 27563	W/R	Auto control method setting	1 Energy saving 0 Comfort	Status parameter	★ (35)
Bit 27564	W/R	Humidification function setting	1:ON 0:OFF	Status parameter	Reserved function
Bit 27565		Reserved			

Bit 27566		Reserved			
Bit 27567		Reserved			
Bit 27568		Reserved			
Bit 27569		Reserved			
Bit 27570		Reserved			
Bit 27571		Reserved			
Bit 27572		Reserved			
Bit 27573		Reserved			
Bit 27574		Reserved			
Bit 27575	R	IDU error	1:Error 0:Normal	Error parameter	
Bit 27576	R	ON/OFF status	1:ON 0:OFF	Status parameter	
...					
Bit 27583		Reserved			

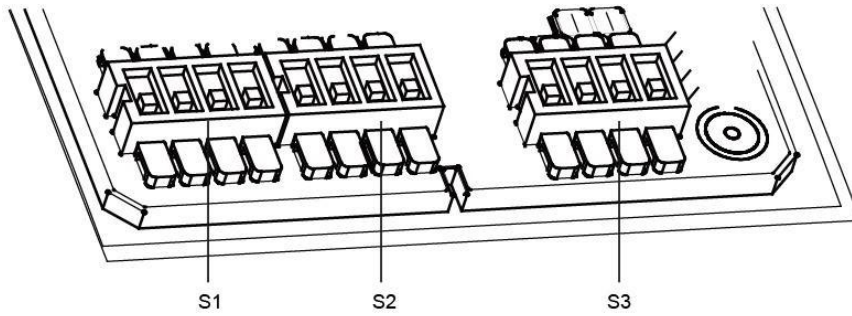
## VI. Precautions before the use of Modbus gateway

1. Make sure the power supply is consistent with specifications; otherwise, Modbus gateway will not work or may even be damaged.
2. Make sure the DIP switch is correctly set; otherwise, communication failure will occur.
3. Make sure the communication lines are connected to correct interfaces; otherwise, communication failure will occur.
4. Strengthen the connection of communication lines with soldering tin. Use insulating tape to protect the lines from oxidization and short circuit.
5. Working condition for the Modbus gateway:
  - ① Temperature:  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$
  - ② Humidity  $\leq 85\%$
  - ③ Installed indoors, inside an electric control cabinet, avoid direct sunlight, rain and snow.
  - ④ Wiring arrangement between the communication lines of strong current and week current shall be separated, and the distance shall be over 15cm, otherwise, it might affect the communication;
  - ⑤ Wiring arrangement of communication lines shall avoid the lightning protection grid.
6. Warning: If the working condition cannot meet the above requirements, Modbus gateway may fail to function normally.
7. In installation process, the twisted-pair of communication cord provided by Gree is recommended. The length shall be decided according to the engineering demand, parts of circuit user shall prepare the 4-core(or 2-core) V twisted-pair themselves.
8. Gree reserves the right to upgrade the product without prior notice.

## VII. Introduction of Modbus gateway dial-up

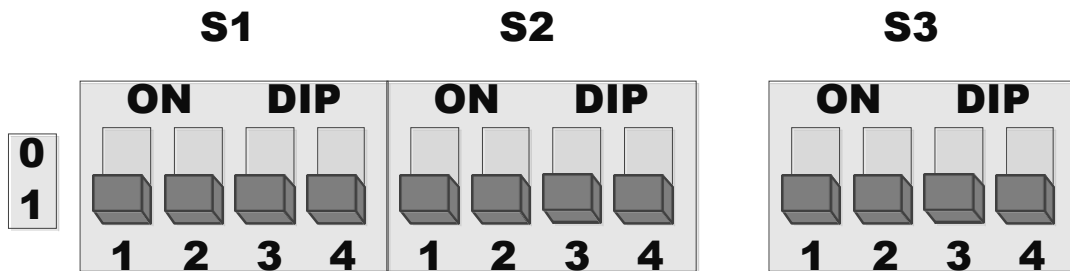
Before using this device, please conduct dial-up setting first, otherwise the unit will not function normally!

Modbus gateway dial-up setting area is inside the product and consisting of address DIP switch and function DIP switch.



1. Diagram of DIP switch

The address DIP switch is consisting of S1 and S2, S3 is the function DIP switch.



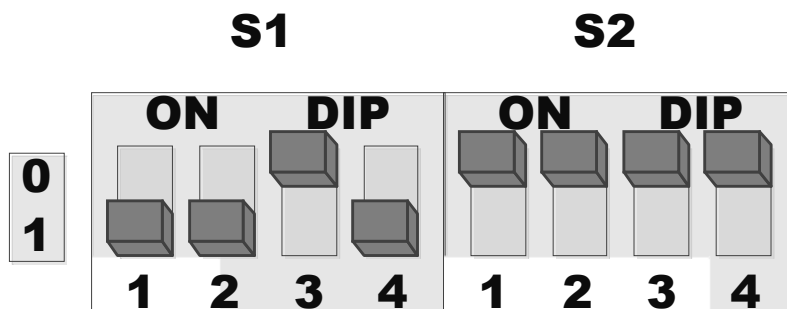
2. Address DIP switch

2.1 DIP switch S1 and S2—Address setting for MODBUS gateway

Before using the gateway, please set the address DIP switch for the gateway first, and the dial-up address of the same bus network cannot be repeated, otherwise it would result in communication fault. Address setting range for Modbus gateway is 1~255.

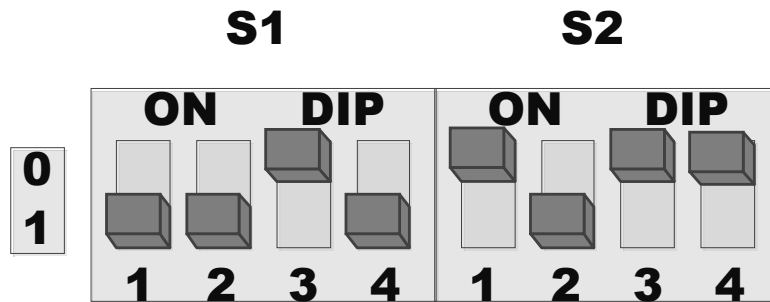
Example of address setting:

Setting method for address 11 is as shown in the following fig:



Address DIP form								Value
S1				S2				
1	2	3	4	1	2	3	4	
1	1	0	1	0	0	0	0	11

Setting method for address 43 is as shown in the following fig:



Address DIP form								Value
S1				S2				
1	2	3	4	1	2	3	4	
1	1	0	1	0	1	0	0	43

3. Function DIP switch S3

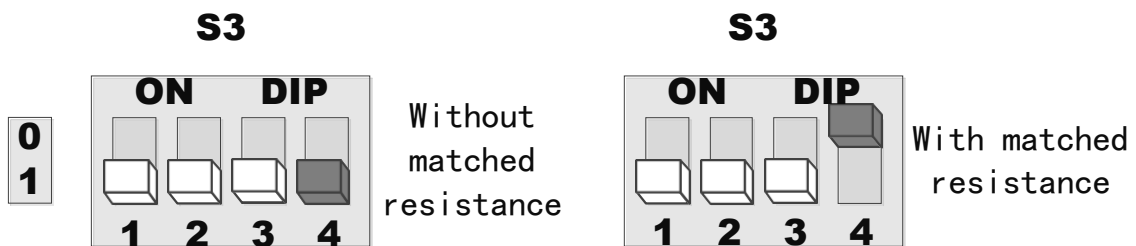
3.1 No.4 of function DIP switch S3—matched resistance setting of CAN2 bus

Master control ODU or gateway at the top/end of CAN2 bus must be set with matched resistance, otherwise, the communication might be wrong!

The No.4 button of function DIP switch shall be used in the setting of matched resistance of CAN2 bus in this gateway.

When Modbus gateway is at the top/end of CAN2 bus, the gateway shall be set with matched resistance, then dial the No.4 button of function DIP switch to 0;

When Modbus gateway is not at the top/end of CAN2 bus, the gateway is set without matched resistance, then dial it to 1. Dial-up setting diagram of matched resistance is as follows:



3.2 No.3 of function DIP switch S3—matched resistance setting of bus 485

The No.3 button of function DIP switch shall be used in the setting of matched resistance of bus 485 in this gateway.

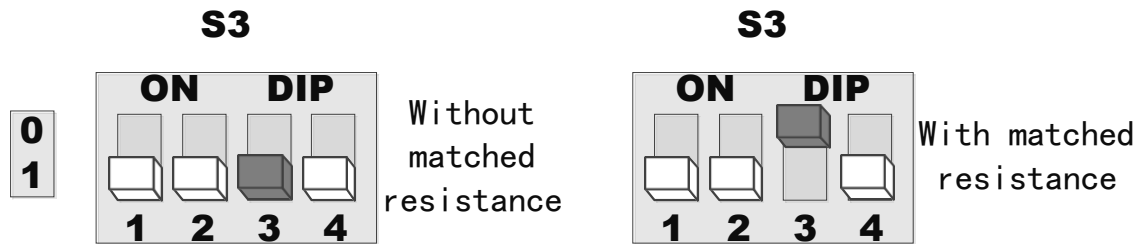
In bus 485, the terminal node shall be with matched resistance to avoid signal reflection in transmission line.

Generally speaking, for Modbus gateway in the application, the master unit is the matched resistance for bus 485 of terminal node, then dial-up setting for it shall be accorded with the ex-factory setting acquiescently, without matched resistance.

If Modbus gateway is needed to be the node of matched resistance in bus 485, then dial-up it with

matched resistance, and connect Modbus gateway to the terminal of bus 485.

Dial-up setting diagram for matched resistance is as follows:



### 3.3 No.2 of function DIP switch S3—engineering code setting for gateway starting IDU

In CAN2 network, each IDU has a unique identification which can distinguish itself from the other IDUs, this identification is called engineering code for IDU. Engineering codes for IDU in CAN2 network are different. Engineering code for gateway starting IDU represents the range which the gateway can deal with. No.2 of function DIP switch is used for the engineering code setting of gateway starting IDU.

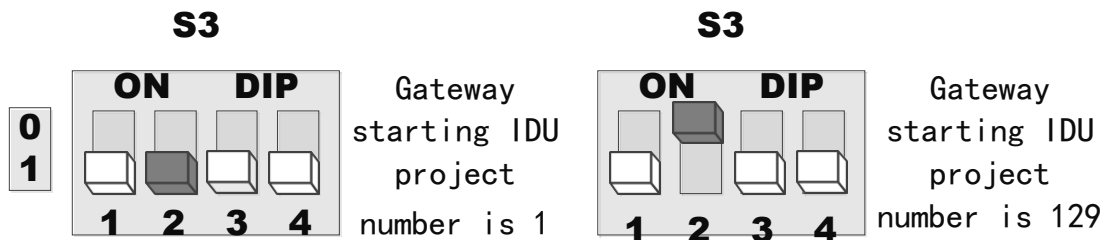
Engineering code range for IDU is 1~255.

Engineering code for gateway starting IDU is 1: this gateway can deal with the IDUs with the engineering code between 1~128.

Engineering code for gateway starting IDU is 129: this gateway can deal with the IDUs with the engineering code between 129~255.

If the IDU engineering code is beyond the available range of gateway, then change the engineering code of IDU.

Dial-up setting diagram for the engineering code of gateway starting IDU is as follows:





# Annex A

(Regulatory Annex)  
Calculation Method of Cyclic Redndancy Code (CRC)

## A.1 CRC calculation method

The calculation method of CRC is: First, preset a 16-bit register to 1 for all; then, process each piece of 8-bit data step by step. When calculating CRC, XOR the 8-bit data with register data and then right shift the result towards the low bit by one bit and fill 0 into the high bit. Then check the low bit, if it is 1, XOR register contents with the preset number; if it is 0, stop the XOR operation. Repeat this process for 8 times. After right shift is conducted for 8 times, XOR the next piece of 8-bit data with the current register contents and repeat the process as instructed above for 8 times. When every piece of data has been procesd, the last register is the result of CRC.

## A.2 How to calculate CRC

- 1) Preset a 16-bit register to hexadecimal characters FFFF(i.e. 1 for all). Name this register as CRC register.
- 2) XOR the first piece of 8-bit data with the low bit of 16-bit CRC register, then place the result into CRC register.
- 3) Right shift register contents by one bit (towards the low bit), then fill 0 into the high bit. Before shifting, check the low bit.
- 4) If the low bit is 0, repeat step 3 (right shift again);  
If the low bit is 1, then XOR CRC register with multinomial A001(1010 0000 0000 0001).
- 5) Repeat step 3 and 4 until right shift is conducted for 8 times, so that the entire piece of 8-bit data has been processed.
- 6) Repeat from step 2-5 to process the next piece of 8-bit data.
- 7) The final CRC register is the result of CRC.

## A.3 CRC Example(for reference only)

Parameter: Data (data block starting address), Data Size (data block byte count)

Return: CRC calculation result

```
uint16 CRC_Calculate(uint8 *data, uint16 dataSize)
{
    uint8 i;
    uint8 temp;
    uint16 j;
    uint16 CRCCode;
    CRCCode=0xffff;
    for(j=0;j<dataSize;j++){
        CRCCode = CRCCode^data[j];
        for( i = 0; i < 8; i++ ){
            temp = CRCCode & 0x0001;
            CRCCode = (CRCCode >> 1);
            if(temp ==1){
                CRCCode = (CRCCode^0xA001);// 0xA001 preset polynomial, the constant value.
            }
        }
    }
    return CRCCode;
}
```

## A.4 Rotation mechanism for the nonpolarity of Gateway Modbus interface

The Modbus interface of Gateway (Mini) is non-polar, after energization for the first time, it will rotate the polarity every 3s to find the correct polarity, and rotation will stop until the correct polarity is found.

If energizing the gateway after power off, it will find the polarity every 3s by rotating, rotation will stop until the correct polarity is found.

# Annex B

## B.1 Dial-up table for the gateway address code editor S1 and S2

0~31 DIP address table										32~63 DIP address table											
S1				S2				\		addr	S1				S2				\		addr
1	2	3	4	1	2	3	4	1	2		3	4	1	2	3	4	1	2	3	4	
0	0	0	0	0	0	0	0	0	\	0	0	0	0	0	1	0	0	0	32		
1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	33		
0	1	0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	34		
1	1	0	0	0	0	0	0	0	3	1	1	0	0	0	1	0	0	0	35		
0	0	1	0	0	0	0	0	0	4	0	0	1	0	0	1	0	0	0	36		
1	0	1	0	0	0	0	0	0	5	1	0	1	0	0	1	0	0	0	37		
0	1	1	0	0	0	0	0	0	6	0	1	1	0	0	1	0	0	0	38		
1	1	1	0	0	0	0	0	0	7	1	1	1	0	0	1	0	0	0	39		
0	0	0	1	0	0	0	0	0	8	0	0	0	1	0	1	0	0	0	40		
1	0	0	1	0	0	0	0	0	9	1	0	0	1	0	1	0	0	0	41		
0	1	0	1	0	0	0	0	0	10	0	1	0	1	0	1	0	0	0	42		
1	1	0	1	0	0	0	0	0	11	1	1	0	1	0	1	0	0	0	43		
0	0	1	1	0	0	0	0	0	12	0	0	1	1	0	1	0	0	0	44		
1	0	1	1	0	0	0	0	0	13	1	0	1	1	0	1	0	0	0	45		
0	1	1	1	0	0	0	0	0	14	0	1	1	1	0	1	0	0	0	46		
1	1	1	1	0	0	0	0	0	15	1	1	1	1	0	1	0	0	0	47		
0	0	0	0	1	0	0	0	0	16	0	0	0	0	1	1	0	0	0	48		
1	0	0	0	1	0	0	0	0	17	1	0	0	0	1	1	0	0	0	49		
0	1	0	0	1	0	0	0	0	18	0	1	0	0	1	1	0	0	0	50		
1	1	0	0	1	0	0	0	0	19	1	1	0	0	1	1	0	0	0	51		
0	0	1	0	1	0	0	0	0	20	0	0	1	0	1	1	0	0	0	52		
1	0	1	0	1	0	0	0	0	21	1	0	1	0	1	1	0	0	0	53		
0	1	1	0	1	0	0	0	0	22	0	1	1	0	1	1	0	0	0	54		
1	1	1	0	1	0	0	0	0	23	1	1	1	0	1	1	0	0	0	55		
0	0	0	1	1	0	0	0	0	24	0	0	0	1	1	1	0	0	0	56		
1	0	0	1	1	0	0	0	0	25	1	0	0	1	1	1	0	0	0	57		
0	1	0	1	1	0	0	0	0	26	0	1	0	1	1	1	0	0	0	58		
1	1	0	1	1	0	0	0	0	27	1	1	0	1	1	1	0	0	0	59		
0	0	1	1	1	0	0	0	0	28	0	0	1	1	1	1	0	0	0	60		

1	0	1	1	1	0	0	0	29	1	0	1	1	1	1	0	0	61
0	1	1	1	1	0	0	0	30	0	1	1	1	1	1	0	0	62
1	1	1	1	1	0	0	0	31	1	1	1	1	1	1	0	0	63

64~95 DIP address table								
S1				S2				\
1	2	3	4	1	2	3	4	addr
0	0	0	0	0	0	1	0	64
1	0	0	0	0	0	1	0	65
0	1	0	0	0	0	1	0	66
1	1	0	0	0	0	1	0	67
0	0	1	0	0	0	1	0	68
1	0	1	0	0	0	1	0	69
0	1	1	0	0	0	1	0	70
1	1	1	0	0	0	1	0	71
0	0	0	1	0	0	1	0	72
1	0	0	1	0	0	1	0	73
0	1	0	1	0	0	1	0	74
1	1	0	1	0	0	1	0	75
0	0	1	1	0	0	1	0	76
1	0	1	1	0	0	1	0	77
0	1	1	1	0	0	1	0	78
1	1	1	1	0	0	1	0	79
0	0	0	0	1	0	1	0	80
1	0	0	0	1	0	1	0	81
0	1	0	0	1	0	1	0	82
1	1	0	0	1	0	1	0	83
0	0	1	0	1	0	1	0	84
1	0	1	0	1	0	1	0	85
0	1	1	0	1	0	1	0	86
1	1	1	0	1	0	1	0	87
0	0	0	1	1	0	1	0	88
1	0	0	1	1	0	1	0	89
0	1	0	1	1	0	1	0	90
1	1	0	1	1	0	1	0	91
0	0	1	1	1	0	1	0	92
1	0	1	1	1	0	1	0	93
0	1	1	1	1	0	1	0	94
1	1	1	1	1	0	1	0	95

96~127 DIP address table								
S1				S2				\
1	2	3	4	1	2	3	4	addr
0	0	0	0	0	1	1	0	96
1	0	0	0	0	1	1	0	97
0	1	0	0	0	1	1	0	98
1	1	0	0	0	1	1	0	99
0	0	1	0	0	1	1	0	100
1	0	1	0	0	1	1	0	101
0	1	1	0	0	1	1	0	102
1	1	1	0	0	1	1	0	103
0	0	0	1	0	1	1	0	104
1	0	0	1	0	1	1	0	105
0	1	0	1	0	1	1	0	106
1	1	0	1	0	1	1	0	107
0	0	1	1	0	1	1	0	108
1	0	1	1	0	1	1	0	109
0	1	1	1	0	1	1	0	110
1	1	1	1	0	1	1	0	111
0	0	0	0	1	1	1	0	112
1	0	0	0	1	1	1	0	113
0	1	0	0	1	1	1	0	114
1	1	0	0	1	1	1	0	115
0	0	1	0	1	1	1	0	116
1	0	1	0	1	1	1	0	117
0	1	1	0	1	1	1	0	118
1	1	1	0	1	1	1	0	119
0	0	0	1	1	1	1	0	120
1	0	0	1	1	1	1	0	121
0	1	0	1	1	1	1	0	122
1	1	0	1	1	1	1	0	123
0	0	1	1	1	1	1	0	124
1	0	1	1	1	1	1	0	125
0	1	1	1	1	1	1	0	126
1	1	1	1	1	1	1	0	127

128~159 DIP address table
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160~191 DIP address table
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S1				S2				\	
1	2	3	4	1	2	3	4	addr	
0	0	0	0	0	0	0	1	128	
1	0	0	0	0	0	0	1	129	
0	1	0	0	0	0	0	1	130	
1	1	0	0	0	0	0	1	131	
0	0	1	0	0	0	0	1	132	
1	0	1	0	0	0	0	1	133	
0	1	1	0	0	0	0	1	134	
1	1	1	0	0	0	0	1	135	
0	0	0	1	0	0	0	1	136	
1	0	0	1	0	0	0	1	137	
0	1	0	1	0	0	0	1	138	
1	1	0	1	0	0	0	1	139	
0	0	1	1	0	0	0	1	140	
1	0	1	1	0	0	0	1	141	
0	1	1	1	0	0	0	1	142	
1	1	1	1	0	0	0	1	143	
0	0	0	0	1	0	0	1	144	
1	0	0	0	1	0	0	1	145	
0	1	0	0	1	0	0	1	146	
1	1	0	0	1	0	0	1	147	
0	0	1	0	1	0	0	1	148	
1	0	1	0	1	0	0	1	149	
0	1	1	0	1	0	0	1	150	
1	1	1	0	1	0	0	1	151	
0	0	0	1	1	0	0	1	152	
1	0	0	1	1	0	0	1	153	
0	1	0	1	1	0	0	1	154	
1	1	0	1	1	0	0	1	155	
0	0	1	1	1	0	0	1	156	
1	0	1	1	1	0	0	1	157	
0	1	1	1	1	0	0	1	158	
1	1	1	1	1	0	0	1	159	

S1				S2				\	
1	2	3	4	1	2	3	4	addr	
0	0	0	0	0	1	0	1	160	
1	0	0	0	0	1	0	1	161	
0	1	0	0	0	1	0	1	162	
1	1	0	0	0	1	0	1	163	
0	0	1	0	0	1	0	1	164	
1	0	1	0	0	1	0	1	165	
0	1	1	0	0	1	0	1	166	
1	1	1	0	0	1	0	1	167	
0	0	0	1	0	1	0	1	168	
1	0	0	1	0	1	0	1	169	
0	1	0	1	0	1	0	1	170	
1	1	0	1	0	1	0	1	171	
0	0	1	1	0	1	0	1	172	
1	0	1	1	0	1	0	1	173	
0	1	1	1	0	1	0	1	174	
1	1	1	1	0	1	0	1	175	
0	0	0	0	1	1	0	1	176	
1	0	0	0	1	1	0	1	177	
0	1	0	0	1	1	0	1	178	
1	1	0	0	1	1	0	1	179	
0	0	1	0	1	1	0	1	180	
1	0	1	0	1	1	0	1	181	
0	1	1	0	1	1	0	1	182	
1	1	1	0	1	1	0	1	183	
0	0	0	1	1	1	0	1	184	
1	0	0	1	1	1	0	1	185	
0	1	0	1	1	1	0	1	186	
1	1	0	1	1	1	0	1	187	
0	0	1	1	1	1	0	1	188	
1	0	1	1	1	1	0	1	189	
0	1	1	1	1	1	0	1	190	
1	1	1	1	1	1	0	1	191	

192~223 DIP address table									
S1				S2				\	
1	2	3	4	1	2	3	4	addr	
0	0	0	0	0	0	1	1	192	
1	0	0	0	0	0	1	1	193	
0	1	0	0	0	0	1	1	194	
1	1	0	0	0	0	1	1	195	
0	0	1	0	0	0	1	1	196	

224~255 DIP address table									
S1				S2				\	
1	2	3	4	1	2	3	4	addr	
0	0	0	0	0	1	1	1	224	
1	0	0	0	0	1	1	1	225	
0	1	0	0	0	1	1	1	226	
1	1	0	0	0	1	1	1	227	
0	0	1	0	0	1	1	1	228	

1	0	1	0	0	0	1	1	197	1	0	1	0	0	1	1	1	229
0	1	1	0	0	0	1	1	198	0	1	1	0	0	1	1	1	230
1	1	1	0	0	0	1	1	199	1	1	1	0	0	1	1	1	231
0	0	0	1	0	0	1	1	200	0	0	0	1	0	1	1	1	232
1	0	0	1	0	0	1	1	201	1	0	0	1	0	1	1	1	233
0	1	0	1	0	0	1	1	202	0	1	0	1	0	1	1	1	234
1	1	0	1	0	0	1	1	203	1	1	0	1	0	1	1	1	235
0	0	1	1	0	0	1	1	204	0	0	1	1	0	1	1	1	236
1	0	1	1	0	0	1	1	205	1	0	1	1	0	1	1	1	237
0	1	1	1	0	0	1	1	206	0	1	1	1	0	1	1	1	238
1	1	1	1	0	0	1	1	207	1	1	1	1	0	1	1	1	239
0	0	0	0	1	0	1	1	208	0	0	0	0	1	1	1	1	240
1	0	0	0	1	0	1	1	209	1	0	0	0	1	1	1	1	241
0	1	0	0	1	0	1	1	210	0	1	0	0	1	1	1	1	242
1	1	0	0	1	0	1	1	211	1	1	0	0	1	1	1	1	243
0	0	1	0	1	0	1	1	212	0	0	1	0	1	1	1	1	244
1	0	1	0	1	0	1	1	213	1	0	1	0	1	1	1	1	245
0	1	1	0	1	0	1	1	214	0	1	1	0	1	1	1	1	246
1	1	1	0	1	0	1	1	215	1	1	1	0	1	1	1	1	247
0	0	0	1	1	0	1	1	216	0	0	0	1	1	1	1	1	248
1	0	0	1	1	0	1	1	217	1	0	0	1	1	1	1	1	249
0	1	0	1	1	0	1	1	218	0	1	0	1	1	1	1	1	250
1	1	0	1	1	0	1	1	219	1	1	0	1	1	1	1	1	251
0	0	1	1	1	0	1	1	220	0	0	1	1	1	1	1	1	252
1	0	1	1	1	0	1	1	221	1	0	1	1	1	1	1	1	253
0	1	1	1	1	0	1	1	222	0	1	1	1	1	1	1	1	254
1	1	1	1	1	0	1	1	223	1	1	1	1	1	1	1	1	255