HT-UD808 UI:8 BO:8

Overview

The HT-UD808 features universal input points and communicates via the RS485 interface using the Modbus rtu protocol. It is designed for control applications requiring flexible I/O capacity. The product is built around a 32-bit ARM-core microcontroller, with 256 KB of Flash memory and 64 KB of RAM.

Applications

The HT-UD808 is suitable for use in:Air handling units (AHU)
Fresh air units
Supply and exhaust fan units
Chilled water units
Collecting wells
Environmental monitoring systems

Power Supply

24V(AC/DC)

Device Address

Set via DIP switches (binary coding)

Inputs

0－10V DC (Range: 0－100)
Temperature NTC-10K
Dry contact

Outputs (BO)

AC24V/DC24V

Dimensions

150*110*51.5(L*W*H)

Material

ABS

Mounting

35 mm DIN rail mounting

HT-UD808 UI:8 BO:8 Register Definition Description

Modbus rtu Register Address Description		
Register Address	Module port	Explanation
BI Point Input Status(0x02)Register Address		
10001	UI 1	Dry contact input
10002	UI 2	Dry contact input
10003	UI 3	Dry contact input
10004	UI 4	Dry contact input
10005	UI 5	Dry contact input
10006	UI 6	Dry contact input
10007	UI 7	Dry contact input
10008	UI 8	Dry contact input
AI Point Input Register(0x04)Register Address		
30001	UI 1	Input port(DC/0-10V)
30002	UI 2	Input port(DC/0-10V)
30003	UI 3	Input port(DC/0-10V)
30004	UI 4	Input port(DC/0-10V)
30005	UI 5	Input port(DC/0-10V)
30006	UI 6	Input port(DC/0-10V)
30007	UI 7	Input port(DC/0-10V)
30008	UI 8	Input port(DC/0-10V)
AI Point Input Register(0x04)Register Address		
30021	UI 1	Input port(NTC-10K)
30022	UI 2	Input port(NTC-10K)
30023	UI 3	Input port(NTC-10K)
30024	UI 4	Input port(NTC-10K)
30025	UI 5	Input port(NTC-10K)
30026	UI 6	Input port(NTC-10K)
30027	UI 7	Input port(NTC-10K)
30028	UI 8	Input port(NTC-10K)
AO Point Coil Status(0x01/0x05)Register Address		
1	BO1	Output port(AC24V/DC24V)
2	BO2	Output port(AC24V/DC24V)
3	BO3	Output port(AC24V/DC24V)
4	BO4	Output port(AC24V/DC24V)
5	BO5	Output port(AC24V/DC24V)
6	BO6	Output port(AC24V/DC24V)
7	BO7	Output port(AC24V/DC24V)
8	BO8	Output port(AC24V/DC24V)
AO Point Holding Register(0x03/0x06)（Baud rate/Address Code Setting）		
40011	/	Baud Rate Setting（9600/19200）
40012	/	Input port type setting

HT-UD808 UI:8 BO:8 Communication Specifications:

The Modbus RTU module has factory default communication parameters as follows:Baud rate: 19200.Data bits: 8.Stop bits: 1.Parity: None.Custom factory default baud rates are available upon request.Using the third-party tool ModbusPoll software, the values read from registers 40011 and 40012 correspond to the baud rate setting and input port type setting, respectively.The configured parameters will take effect after a power cycle.The device address is set via DIP switches.

I/O Port Configuration Guide:

For example, to configure input ports 1, 2, 5, and 6 as analog inputs, and the remaining ports as digital inputs:(Where 0 = digital input, 1 = analog input)Set register 40012 to 51 via the Modbus RTU protocol.

UI 8	UI 7	UI 6	UI 5	UI 4	UI 3	UI 2	UI 1	Convert to decimal
0	0	1	1	0	0	1	1	51

You can use the built-in calculator function on your computer to quickly convert binary numbers to decimal. Set the calculator to Programmer mode.To set a specific bit to 1, simply click the corresponding position to toggle it from 0 to 1, and vice versa, as shown in the figure below: