



HAC-Smart Series

HAC-US433/M1 Radio Modem

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SHENZHEN HAC TELECOM TECHNOLOGY CO., LTD



CATALOGUE

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The summary of the HAC-US433/M1

HAC-US433/M1 is a product which is based on the standard wireless module HAC-US433 of SHENZHEN HAC TECHNOLOGY CO., LTD. It adds a serial port convertor and a black aluminum extruded shell. It can provide standard serial interface, state indicator, selection and setting of parameter. It can embed many kinds of standard wireless modules which are made by us. Please refer to HAC-US433 product specification for more technical specifications such as frequency, power, sensitivity, voltage, current, distance and so on.

The type name method of HAC-US433/M1:

1. HAC-US433 is the standard HAC wireless module type. The more technical specifications can be seen from the manual of HAC-US433.
2. The MX series can be sorted by the interface format and the interface level.
 - (1) The M1 can provide serial data port of TTL level, standard RS232 and RS485 level .
 - (2) The M2 only can provide serial data port of standard RS232 level.
 - (3) The M3 only can provide serial data port of standard TTL level.
 - (4) The M4 only can provide serial data port of standard RS485 level.

Functions of the HAC-US433/M1

1. It can provide standard TTL, RS232 or RS485 serial data port.
2. It has indicator light which can indicate the state of power and transmitting data.
 - a. The power indicator light: When the module is electrified, the red light is on.
 - b. The signal indicator light: Receiving efficient data from air, the green light is on. Transmitting Efficient data to air, the red light is on.

The switch definition of the HAC-US433/M1

Before using HAC-US433/M1, user can make simple configuration based on its own needs to determine the channel and data format. HAC-US433/M1 has a 8-bit switch. When the switch is "ON", it is mode 0. By contraries, it is mode 1. The configuration is shown as follow:

NO.	Name	Functions	Remarks
1	NC		
2	NC		
3	NC		
4	NC		



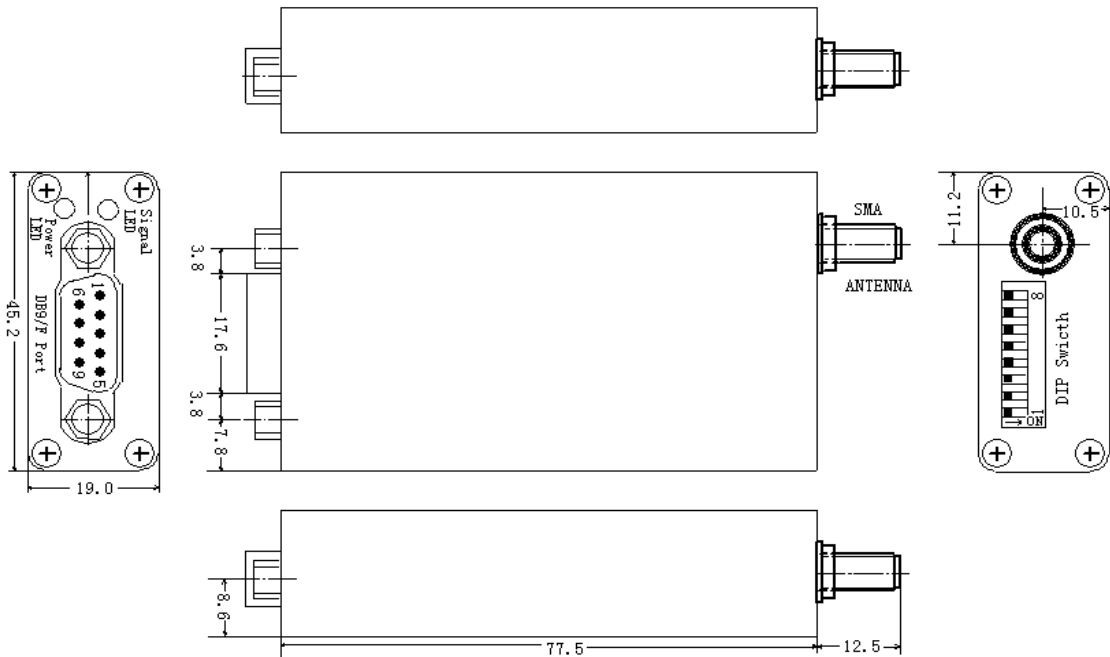
- 5 NC
- 6 SET_EN Enable Setup =0, Setup state. =1, communication state.
- 7 NC
- 8 NC

In the setup mode, user can use Studio software or Command setting to change the working channel by connecting with the computer.

IV The DB9/M interface definition of the HAC-US433/M1

Pin No	Definition	Instruction	Level	Connected to the terminal	Connecting with the computer
1	reservation				
2	RxD	The RxD of RS-232	RS-232	TxD	Connect to the third pin of computer
3	TxD	The TxD of RS-232	RS-232	RxD	Connect to the second pin of computer
4	VCC	Power supply	Standard type	DC power supply	
5	GND	Power ground and Signal ground	0	Ground	Connect to the fifth pin of computer
6	TxD	TxD of TTL	TTL	RxD	
7	RxD	RxD of TTL	TTL	TxD	
8	A	The A of RS-485	RS-485	A	
9	B	The B of RS-485	RS-485	B	

V The dimension and fixing of the HAC-US433/M1 (mm)



VI The standard configuration of the HAC-US433/M1

- 1 . A 10cm helical SMA antenna with an elbow-joint HAC-433-10-ZSMA
- 2 . The M1, M2, M3 and M4 can be used with a DB9/F connector.



- 3 . One CD (just for samples)
- 4 . User can buy the bracket if needed. The setting is as follow:

