

Pin Description

PIN15	Vin (Voltage input 5V-12V)
PIN5、PIN14	GND
PIN1	VOUT(Voltage output 3.0V)
PIN3	Reserved
PIN4	Reserved
PIN7	UART (RXD) 0~3.0V Data input
PIN8	UART(TXD) 0~3.0V Data output
PIN9	Sensor analog signal
PIN10	DAC 0.4V-2V (0 - full range)
PIN2/ PIN6/ PIN11/ PIN12/ PIN13	NC

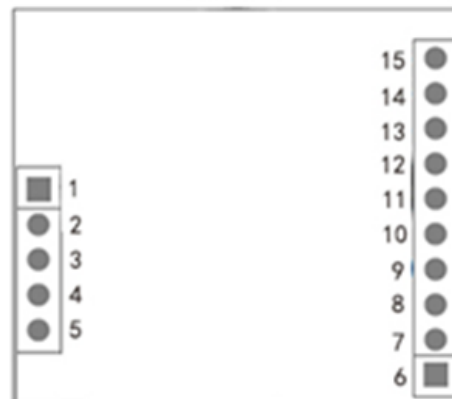


Fig 2 Pins Diagram

Communication Protocol

1. General Settings

Table 3

Baud Rate	9600
Data Bits	8
Stop Bits	1
Check Bits	Null

2. Communication Commands

There are two kinds of communication, initiative upload mode and question & answer mode. We take initiative upload mode as the default settings. The module upload a gas concentration value every 1S, and the command line format is as follows: **Table 4**

Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte6	Byte 7	Byte 8
Start Byte	Gas Type	Unit	No. of decimal	Concentration (High Byte)	Concentration (Low Byte)	Full Range (High Byte)	Full Range (Low Byte)	Check sum
0xFF	CO=0x04	ppm=0x03	1= 0x01	0x00	0x25	0x13	0x88	0x25

Gas concentration value = (High Byte*256+Low Byte) x 0.1

Please note that in the above calculation formula, the byte4 and byte5 means the decimalism value changed from hexadecimal. For example: Original byte4 is 1B and original byte5 is 2C.

1B is hexadecimal and it is 27 after changing to decimalism.

2C is hexadecimal and it is 44 after changing to decimalism.

So, concentration= (27x256+44)x0.1