

6	R	RX of UART (TTL) @3.3V
7	T	TX of UART (TTL) @3.3V

PS: The distance between each pin is 2.54mm.

The UART communication protocol

Bit rate : 9600

Data bit : 8

Parity bit: NO

Stop bit : 1

Data Packet frequency: 1Hz

The number of bytes	Name	Content
0	Message header	AA
1	Commander No.	C0
2	DATA 1	PM2.5 Low byte
3	DATA 2	PM2.5 High byte
4	DATA 3	PM10 Low byte
5	DATA 4	PM10 High byte
6	DATA 5	ID byte 1
7	DATA 6	ID byte 2
8	Check-sum	Check-sum
9	Message tail	AB

Check-sum: Check-sum=DATA1+DATA2+...+DATA6 。

PM2.5 value: $PM2.5 (\mu g / m^3) = ((PM2.5 \text{ High byte} * 256) + PM2.5 \text{ low byte}) / 10$

PM10 value: $PM10 (\mu g / m^3) = ((PM10 \text{ high byte} * 256) + PM10 \text{ low byte}) / 10$

PWM output description

Range of PM2.5 value	0-999 $\mu g / m^3$
Range of PM10 value	0-999 $\mu g / m^3$
Cycle	1004ms $\pm 1\%$
High level output time at the beginning of the whole cycle	2ms
The middle time of this cycle	1000ms $\pm 1\%$
Low level output time at the end of the whole cycle	2ms