SSAP10 UART data analyse:

Baterate: 9600 bps;

Parity: None

Stop:1

Data total Length: 32

|  |  |  |  |
| --- | --- | --- | --- |
| **Index** |  | **Date** | **Explanation** |
| 1 | Start\_1 | 0x40 | fixed |
| 2 | Start\_2 | 0x4d | 0x4d（active mode）,0x4e（Polling mode） |
| 3 | Frame Length\_H | \*\* | Frame:2x13+2(data+check) |
| 4 | Frame Length\_H | \*\* |
| 5 | Date1\_H | \*\* | PM1.0 concentration (Standard particulate) unit μg/ m3 |
| 6 | Date1\_L | \*\* |
| 7 | Date2\_H | \*\* | PM2.5 concentration (Standard particulate) unit μg/ m3 |
| 8 | Date2\_L | \*\* |
| 9 | Date3\_H | \*\* | PM10 concentration (Standard particulate) unit μg/ m3 |
| 10 | Date3\_L | \*\* |
| 11 | Date4\_H | \*\* | PM1.0 concentration（Atmospheric environment）  Unit μg/ m3 |
| 12 | Date4\_L | \*\* |
| 13 | Date5\_H | \*\* | PM 2.5 concentration（Atmospheric environment）  Unit μg/ m3 |
| 14 | Date5\_L | \*\* |
| 15 | Date6\_H | \*\* | PM 10 concentration（Atmospheric environment）  Unit μg/ m3 |
| 16 | Date6\_L | \*\* |
| 17 | Date7\_H | \*\* | number of particles with diameter 0.3um or above in 1 liter of air |
| 18 | Date7\_L | \*\* |
| 19 | Date8\_H | \*\* | number of particles with diameter 0.5um or above in 1 liter of air |
| 20 | Date8\_L | \*\* |
| 21 | Date9\_H |  | number of particles with diameter 1.0um or above in 1 liter of air |
| 22 | Date9\_L | \*\* |
| 23 | Date10\_H | \*\* | number of particles with diameter 2.5um or above in 1 liter of air |
| 24 | Date10\_L | \*\* |
| 25 | Date11\_H | \*\* | number of particles with diameter 5um or above in 1 liter of air |
| 26 | Date11\_L | \*\* |
| 27 | Date12\_H | \*\* | number of particles with diameter 10um or above in 1 liter of air |
| 28 | Date12\_L | \*\* |
| 29 | Date13\_H | \*\* | Module number |
| 31 | Date13\_L | \*\* |
| 31 | Check\_H | \*\* | Check code = start character 1 + start character 2+........ + data 13 low eight |
| 32 | Check\_L | \*\* |

**Note:**

* **Standard particulate:** by density conversion of industrial metal particles as equivalent particles, Suitable for **industrial production workshops and other environments.**
* **Atmospheric environment:** using the main pollutants in the air as equivalent particles, suitable for **ordinary indoor and outdoor atmospheric environments.**