

YF10X Series

Indoor Air Quality Sensor

It adopts the standard Modbus RTU communication protocol and supports function codes 0x03, 0x04, 0x06, and 0x10. (Supported communication baud rates: 2400, 4800, 9600, 19200, 38400, 57600, and 115200. The device address can be set from 1 to 254.)

System parameters can be configured simultaneously via both USB and RS485 interfaces.

To restore the system to factory settings: press and hold the reset button until a buzzer sound is heard, then release the button. The system will automatically revert to the default parameters: baud rate 9600 and device address 1.

Register Address	Register Definition	Read/Write	Data Unit	Data Type	Remarks
0	PM1.0	Read-only	ug/m3	uint16	For unsigned sensor parameters, a value of 0xFFFF indicates that the parameter is offline. For signed sensor parameters, a value of 0x7FFF indicates that the parameter is offline.
1	PM2.5	Read-only	ug/m3	uint16	
2	PM10	Read-only	ug/m3	uint16	
3	TVOC	Read-only	ug/m3	uint16	
4	CO2	Read-only	ppm	uint16	
5	Temp	Read-only	°C	int16	
6	Humi	Read-only	%RH	uint16	
7	ATM	Read-only	hPa	uint16	
8	Light	Read-only	lux	uint16	
9	Noise	Read-only	db	uint16	
10	Motion	Read-only	Dimensionless	uint16	
11	Smoke	Read-only	Dimensionless	uint16	
12	CH2O	Read-only	ug/m3	uint16	

13	C2H5OH	Read-only	ug/m3	uint16	
14	O2	Read-only	%VOL	uint16	
15	NH3	Read-only	ppm	uint16	
16	O3	Read-only	ppb	uint16	
17	EX	Read-only	%LEL	uint16	
18	CO	Read-only	ppm	uint16	
19	H2S	Read-only	ppm	uint16	
20	SO2	Read-only	ppm	uint16	
21	H2	Read-only	ppm	uint16	
22	CH4	Read-only	%LEL	uint16	
23	NO	Read-only	ppm	uint16	
24	NO2	Read-only	ppm	uint16	
25	SF6	Read-only	ppm	uint16	
26	HCL	Read-only	ppm	uint16	
27	C7H8	Read-only	ppm	uint16	
28	NOX	Read-only	ppm	uint16	
29	HCN	Read-only	ppm	uint16	
30	PH3	Read-only	ppm	uint16	
31	CL2	Read-only		uint16	
32	C6H6	Read-only		uint16	
33	BR2	Read-only		uint16	
34	HF	Read-only		uint16	
35	CLO2	Read-only		uint16	
36	C2H4O	Read-only		uint16	
37-63	Sensor Reserved	Read-only		uint16	
64-73	Total of 10 registers (i.e., 20 characters representing the product model)	Read-only		uint16	
74-77	Reserved	Read-only		uint16	
78	Firmware Release Year	Read-only		uint16	
79	Firmware Release Month	Read-only		uint16	
80	Firmware Release Day	Read-only		uint16	
81	Software Version	Read-only		uint16	
82	Hardware Version	Read-only		uint16	
83	Slave Address	Read/Write		uint16	
84	Baud Rate	Read/Write		uint16	
85	DIP Switch Enable/Disable	Read/Write		uint16	

86-92	Reserved	Read/Write		uint16	
93	Temperature Calibration (Note: To set target temperature 27.3, send value 273)	Read/Write		int16	
94	Light Control	Read/Write		uint16	
95	Buzzer Control	Read/Write		uint16	
96-122	Reserved	Read/Write		uint16	