

# CO2(Carbon dioxide) Sensors Comparison and Selection Guide Table

## 1. CO2 OEM Modules ○ : Yes, ● : Order option, X : No options

Application list = A : Software ACDL(Indoor ventilation,HVAC), G: Green house, L : Low power, LG: Lowpower+ Greenhouse

No.	Types	Model	Sensing Gas	Supply Voltage	Size (mm)	Accuracy	Outputs						Subsidiaries with suffix	Application	Marked as
							Range (ppm)	UART Serial	I2C	PWM	Linear Voltage	Digital Alarm			
1	Popular Module	S-110	CO2	5 VDC (4.75-5.25)	33x33x13.1	30ppm±3%	0~2K,3K,5K,10K	○	○	X	●	X	A	Residential, Agricultural	Small, Stable, popular
2	Module	S-110H	CO2	12 VDC (9.0-18.0)	39x32x18.5	50ppm±3%	0~2K,3K,5K,10K	○	○	X	●	X	A	Residential, Agricultural	Small, Stable
3	Module	S-300	CO2	5 VDC (4.75-5.25)	33x33x13.1	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	○	A, G, L, LG	Residential, Agricultural, Weather	5.0V input type, Low-Power popular
4	Popular Module	S-300-3V	CO2	3 VDC (3.20~3.60)	33x33x13.1	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	○	A, G, L, LG	Residential, Agricultural, Weather	3.3V input type, Low-Power, popular
5	Small size Module	T-110	CO2	5 VDC (4.75~5.25)	19x29.3x8.5	50ppm±3%	0(400)~2K,3K,5K,10K, 20K, 30K, 50K,10K	○	○	●	●	●	A, G, L, LG	Residential, Agricultural	5.0V input type, Smallest
6	Popular Module	T-110-3V	CO2	3 VDC (3.20~3.55)	19x29.3x8.5	50ppm±3%	0(400)~2K,3K,5K,10K, 20K, 30K, 50K,10K	○	○	●	●	●	A, G, L, LG	Residential, Agricultural	3.3V input type, Smallest, popular
7	Stable, small Module	T-200	CO2	5 VDC (4.75~5.25)	19x29.3x8.5	50ppm±3%	0(400)~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	●	A, G, L, LG	Residential, Agricultural	5.0V input type, Smallest & fast response, popular
8	Stable, small Module	T-200-3V	CO2	3 VDC (3.20~3.55)	19x29.3x8.5	50ppm±3%	0(400)~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	●	A, G, L, LG	Residential, Agricultural	3.3V input type, Smallest & fast response, popular
9	Economical Module	IoT-S300E	CO2	5 VDC (4.75~5.25)	33x33x13.1	50ppm±5%	0~2K,3K,5K,10K	○	○	X	X	X	A	Residential	Small, Economical
10	Economical Module	IoT-S300E-3V	CO2	3 VDC (3.20~3.55)	33x33x13.1	50ppm±5%	0~2K,3K,5K,10K	○	○	X	X	X	A	Residential	Small, Economical
11	High % Module	H-250	CO2	5 VDC, 12VDC	32.5x38x19.1 (5V), 50x69x20 (12V)	±300ppm ±3%	0 ~ 5%,10%,15%, 20%, 25%	○	○	X	●	X	G	Incubator High Concentration	5V, 12V input type, Smallest high%
12	High % Module	H-250-3V	CO2	3 VDC (3.20~3.55)	32.5x38x19.1	±300ppm ±3%	0 ~ 5%,10%,15%, 20%, 25%	○	○	X	●	X	G	Incubator High Concentration	3V input type, Smallest high%
13	Module	B-530	CO2	12 VDC (9.0~15.0)	65x50x20	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	X	X	○	X	G	Residential, Agricultural	High stability
14	Dual Module	D-300	CO2	5 VDC (4.75~5.25)	33x33x13.1	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	○	G, L, LG	Residential, Agricultural	5.0V input type, World Smallest Dual Beam
15	Dual Module	D-300-3V	CO2	3 VDC (3.20~3.60)	33x33x13.1	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	●	●	○	G, L, LG	Residential, Agricultural	3.3V input type, World Smallest Dual Beam, popular
16	Dual Module	D-400	CO2	12V, 5V, 3.3 VDC (Choice in one board)	50×69×26	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	○	○	X	G	Residential, Agricultural, Weather	High end, Multi functional on board, Dual Beam

## 2. CO2 Transmitters

No.	Types	Model	Sensing Gas	Supply Voltage	Size	Accuracy	Outputs							Application	Marked as
							Range (ppm)	Current 4~20mA 2~20mA	Voltage 0~10V 2~10V	Relay	Wiring	LCD	RS485 Modbus		
1	Transmitter	CD-100	CO2	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	X	3-Wired, 4-Wired	●	X	Residential, Agricultural,	jumper selectabe function, analog output base model
2	Transmitter	CD-100M	CO2	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	X	3-Wired, 4-Wired	●	○	Residential, Agricultural,	Modbus, base model
3	AQS Transmitter	CD-100MHT	CO2, Temp, Humidity	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	X	3-Wired, 4-Wired	●	○	Residential, Agricultural,	Modbus, Temp. R.H.
4	Low Temp. Transmitter	CD-100BZ	CO2	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	X	3-Wired, 4-Wired	●	X	Frozen Warehouse	Low-temperature operation only (-25°C)
5	Transmitter	CD-200	CO2	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	○	4-Wired	●	X	Residential	with Relay
6	Transmitter	CD-300	CO2	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K, 20K, 30K, 50K, 70K	○	○	X	3-Wired	●	X	Residential, Agricultural, Incubator	upto High ppm
7	Transmitter	CD-300-D3	CO2	24VDC,AC (18-28)	123x69x40	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	X	3-Wired, 4-Wired	●	X	Residential, Agricultural, Incubator	Aplied CO2 Dual Beam (D-300)
8	Transmitter	M-530(G)	CO2	12 VDC (9.0~15.0)	123x69x40	30ppm±5%	0~2K,3K,5K,10K, 20K, 30K, 50K	X	0.5V~4.5V	X	3-Wired	●	X	Residential, Agricultural(G)	12V input, UART, Analog output (0.5V ~ 4.5V)
9	High End Transmitter	CD-400	CO2, Temp	24VDC,AC (18-28)	123x69x40	30ppm±5%	0~2K,3K,5K,10K	○	○	●	3-Wired, 4-Wired	●	X	Residential, Agricultural,	Jumper selectable, Temperature.(Optional)
10	AQM Transmitter	AQM-100	CO2, Temp, Humidity, VOCs	12VDC (9~38)	118x74x22	50ppm±3%	0~10K	X	X	X	X	X	○	Residential, Workplaces	RS485 modubus
11	Duct Transmitter	DUT-2000	CO2	24VDC,AC (18-28)	Body : 85x115x45 Probe : 250x40Ø	30ppm±3%	0~2K,3K,5K,10K, 20K, 30K, 50K	○	○	○	3-Wired, 4-Wired	●	○	Duct Mounting Residential, Agricultural	Inside Dual-beam module, (D-300)

### 3. CO2, Temperature, R.H., and VOCs Monitors

No.	Types	Model	Sensing Gas	Supply Voltage	Size	CO2 Accuracy	Outputs						Application	Marked as	
							Range (ppm)	LCD	LED	USB	RS485 Modibus	Sound Alarm			Wireless
1	Module	MT-200	CO2	3.3VDC USB type	20x58x11	50ppm ±3%	0~10K	X	○	○	X		X	Smart phone, PC,USB-connect	World Smallest USB Monitor
2	Monitors	MB-350	CO2, Temp, Humidity	12VDC, 1A Adaptor	135x90x28	30ppm±3%	0~10K	○	○	X	●	●	●(Zigbee)	Residential, Classroom	High Accurate, Popular
3	USB Monitors	MB-350U	CO2, Temp, Humidity	12VDC, 1A Adaptor	135x90x28	30ppm±3%	0~10K	○	○	○	●	●	●(Zigbee)	Residential, Classroom, PC,USB-connect	High Accurate, Popular
4	USB Monitors	MB-350U-V	CO2, Temp, Humidity, VOCs	12VDC, 1A Adaptor	135x90x28	30ppm±3%	0~10K	○	○	○	●	●	●(Zigbee)	Residential, Classroom, PC,USB-connect	High Accurate
5	USB Monitors	AM-1000	CO2, Temp, Humidity, VOCs, PM2.5 Pressure	12VDC, 1A Adaptor	135x90x38	30ppm±3%	0~10K	○	○	○	●	●	●(Zigbee)	Residential, Classroom, PC,USB-connect	Optional(VOCs, PM2.5, Pressure) High Accurate
6	USB Monitors	MB-350U-C	CO2, Temp, Humidity, CO	12VDC, 1A Adaptor	135x90x28	30ppm±3%	0~10K	○	○	○	●	●	●(Zigbee)	Residential, building PC,USB-connect	High Accurate
7	USB Monitors	MB-350U-CV	CO2, Temp, Humidity, VOCs, CO	12VDC, 1A Adaptor	135x90x28	30ppm±3%	0~10K	○	○	○	●	●	●(Zigbee)	Residential, building PC,USB-connect	High Accurate