

ST-502



Features

- Non-Dispersive Infrared (NDIR) CO₂ sensor ensures long term stability and durability
- 4 Measurements-CO₂ / CO₂ Ventilation Rate / Temperature / Humidity
Large display
- Easy-to-use PC software for parameter settings and analysis
Fast USB download
- Internal backup battery to maintain date / time setting
- CO₂ / Temperature / Humidity: high,low alarm setting
- Set on the table or wall-mounted (use 1/4 tripod nut)
- Power adaptor AC 100V~240V to DC 12V / 1.0 A

Applications

- Building HVAC monitoring
- Indoor air quality survey

Specifications

- Datalogging capacity 50,000 records
- Operation condition: 0-50°C (32-122°F), 5-95%RH (non-condensing)
- Storage temperature & Humidity: -10~60°C (14~140°F) ≤70%RH

Temperature

Type	Thermistor
Measurement Range	0°C~50°C / 32°F~122°F
Accuracy	±1.0°C / ±1.8°F
Resolution	0.1°C / 0.1°F
Response Time	Typ. 1 second

Relative Humidity

Type	Capacitive
Measurement Range	5-95%
Accuracy	±3.0%RH (20~80%); ±5.0%RH (<20%, >80%)
Resolution	0.1%
Response Time	Typ. 4 seconds

CO₂

Type	Non-dispersive infra-red (NDIR)
Measurement Range	0 to 9999ppm
Accuracy	±5% of reading or ±75ppm (0-2000ppm, others out of scale range)
Resolution	±1ppm
Response Time	Typ. 2 minutes by 90%

ST-501



Features

- 3 Independent CO₂, humidity and temperature sensors
- Easy-to-use PC software for parameter settings and data analysis
- User operated CO₂ calibration
- Fast USB download Datalogging: 50,000 records
- Internal backup battery to maintain date / time setting
- Power management IC to increase better efficiency
- Internal CO₂ alarm buzzer

Applications

- Building HVAC monitoring
- Indoor air quality survey

Specifications

- CO₂ Sensing Method: NDIR (Non-Dispersive Infrared)
- Measures: Carbon dioxide in PPM, temperature (°F or °C), %Relative Humidity
- CO₂ Measurement range: 0~9999 ppm
- CO₂ Accuracy: ±60ppm or ±5% of reading
- Display resolution: ±1ppm
- Fast USB download: 50,000 records in less than 10 seconds

General

Operation condition	32°F-122°F (0°C-50°C)
	0-95%,RH,non-condensing
Storage temperature	-4°F to 140°F (-20°C to 60°C)

Power Supply

Battery	4 AA batteries
Battery operation	24 hours
External power supply	5V~6V VDC with 0.5A

Relative Humidity Sensor

Type	CMOS Sensor
Measurement range	1%-99%
Accuracy	±3.0%RH (20%~80%) ±5.0%RH (<20%,>80%)
Resolution	0.1%
Response time	8 seconds

CO₂ Sensor

Type	Non-dispersive infrared (NDIR)
Measurement range	0 to 9999ppm
Accuracy	±60ppm or ±5% of reading
Resolution	±1ppm
Response time	2 seconds

Temperature

Type	Thermistor
Measurement range	0°C~50°C
Accuracy	1°C from 0°C~50°C
Resolution	0.1°C
Response time	1 second