



C02 transmitter & controller

ESTSP series of C02 detectors and controllers

overview

- A new, low-cost, low maintenance carbon dioxide detect or with powerful functions
- Perfect C02 transmitter/controller
- C02 measurement range: 0 to 2,000ppm (standard); 0 to 5,000ppm (optional)
- LED visual and audible alarms
- NDIR infrared C02 sensor with patented ABC self calibration
- One or two 0~10VDC /4~20mA linear outputs for C02 or C02/Temp.
- PID control output selectable for C02 measurement
- LED light selectable between 3-color mode and working mode
- Optional OLED screen displays measurements
- One relay output optional for a ventilator or a C02 generator
- Buzzer alarm provided for the models with relay
- CE approval



A programmable CO2 detector and controller that is ideal for HVAC applications in schools, offices and other indoor workplaces.

The ESTSP measures CO2 and temperature with a relay control output or linear 0-10V/4..20mA to control ventilation units and variable speed drives.

The ESTSP is very easy to use and maintain. The ESTSP has an ABC style self-calibration with the ability to zero, or reset itself, for optimal accuracy. Therefore, the ESTSP can run for many years without extensive support or re-calibration. Alternatively, the team at Edaphic Scientific can re-calibrate the ESTSP for you, if required.

The Tongdy ES-TSP model is similar to the SenseAir tSense model and performs many of the same functions. The ES-TSP is a lower cost version of the tSense model and is ideal for many indoor air applications.

specifications

| feature | specification |
|-------------------------------|--|
| Carbon Dioxide Sensor | |
| Sensing Element | NDIR |
| Measurement Range | 0 to 2,000 ppm (standard) 0 to 5,000 ppm (optional) |
| Measurement Accuracy | ±60 ppm |
| Response Time | <2 minutes for 90% step change typical |
| Signal Update | Every 2 seconds |
| Calibration | ABC Logic Self Calibration Algorithm |
| General Specifications | |
| Power Supply | 24 VAC/VDC |
| Power Consumption | 3.5 W max. ; 2.0 W avg. |
| Analog Output | One 0~10V DC /4~20mA for CO2 measurement Two 0~10V DC /4~20 20mA for CO2/Temperature measurements PID control output is select able |
| Relay Output | One passive relay output (max.5A) |
| RS-485 Modbus Interface | Modbus protocol or BACnet protocol protocol, 4800/9600 (default)/19200/38400bps 38400bps; 15KV antistatic protection, independent base address. |
| LED Screen Displays | Display CO2 or CO2/temp. or CO2/Temp./ RH measurements |
| Operating Environment | 0~50°C; 0~95% non condensing |
| Storage Environment | -10 ~60°C, 0~80%RH |
| Weight and Dimensions | 190g 117 mm (H) ×95mm (×36 mm(D) |
| Installation | wall mounting |
| Housing Material and IP Class | PC/ABS fireproof plastic material, protection class: IP30 |
| Standard | CE approval |
| Warranty | 1 year |

manual & docs

- ESTSP CO2 Datasheet

related products

- CO2 detector with relay
- HVAC and IAQ CO2 detectors
- CO2 detectors, portable meters and data loggers
- Gas detectors, meters and loggers