Datasheet: CO2 Indicator/Controller with Relay

The Tongdy CO2 Indicator/Controller lets you simply and easily monitor and control indoor air quality.

- Use it to visually monitor air quality with its easy-to-read colored LEDs that quickly change from green to yellow to red as indoor air quality declines.
- Use it to control ambient carbon dioxide levels with its on/off relay output to operate a fan control.

With its one-button on/off/auto ease of use and industry-standard 24V power requirements, the Tongdy CO2 Indicator/Controller with Relay is perfect for homes, offices, meeting rooms, classrooms, or anywhere monitoring and controlling indoor air quality is important for occupant's comfort.

- **Real-time Carbon Level Control and Monitor**
- **Six Colored LEDs to Easily Check Indoor IAQ**
- **Industry-Standard Wall-Mount with 24VAC/VDC Power and CE Approval**

CO2 Sensor

Measurement Range ....0 – 2,000 ppm
Sensing Method .... Non-dispersive infrared (NDIR) waveguide technology with ABC automatic background calibration algorithm
Sampling Method .... Diffusion
Response Time ($T_{1/e}$) .... < 2 minutes for 90% step change
Accuracy ………….. +/- 30ppm +3% of reading
Warm up time .... 48 hours after initial power up for ABC calibration, 2 minutes on subsequent use

General Performance

Operating Temperature Range .... 32 – 122°F (0 to 50 °C), 0 – 95% RH non condensing
Storage Temperature Range .... 32 – 122°F (0 to 50 °C), 0 – 95% RH non condensing
Sensor Life Expectancy .... > 15 years
Maintenance Interval .... No maintenance required
Self-Diagnostics .... complete function check of the sensor module
Conformance with the standards................. CE-Approval
Operating Environment .... Residential & business indoor spaces

Display

6 LED Lights …………………………………………… 1st green light <600ppm, 1st and 2nd green lights 600-800ppm, 1st yellow light 800-1200ppm, 1st and 2nd yellow lights 1200-1400ppm, 1st red light 1400-1600ppm, 1st and 2nd red lights >1600ppm

Electrical/Mechanical

Power Input.. 24 VAC/VDC
Current Consumption .... 2.8 W average, 3.5 W Max.
Relay ……………... <240VAC/30VDC 3A Switching Current (resistance load)
Relay Settings………………………………………… 800ppm, 1000ppm, 1200ppm & 1400ppm user selectable via internal jumpers
Housing ……………... PC/ABS fireproof plastic material; protection class IP30
Dimensions .... 100mm (H) × 80mm (W) × 28mm (D) or 2x4" wire box, 180g

Warranty

Model TON-0007   1 Year