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 (τ90) .......................... < 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