

Tongdy

Carbon Dioxide CO2 Products

CO2 Transmitters

CO2 Monitors/Controllers

CO2 Product Customization Service



Tongdy Sensing Technology Corp.

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CO2 TRANSMITTERS

Tongdy CO2 transmitters are designed for real-time measuring air carbon dioxide, optional temperature and relative humidity.

Tongdy CO2 transmitters include wall mount type, duct mount type, and CO2 sensor probe split or external.

They are applied for HVAC systems, BMS systems and other ventilation systems, to meet the energy savings and health requirements.

Carbon dioxide is the traditional and most appropriate measurement parameter for assessing and controlling indoor air quality.



Wall mounted CO2 transmitters

- 💧 Four different series of CO2 transmitter
- 💧 Single CO2 transmitter or 3 in 1 CO2+temp.+RH transmitter
- 💧 CO2 plus VOC's transmitter
- 💧 0~10V/4~20mA outputs and RS485 (Modbus RTU or BACnet MS/TP)
- 💧 WiFi, battery power supply options
- 💧 LCD display or no display optional
- 💧 Six LED lights indicating six CO2 ranges



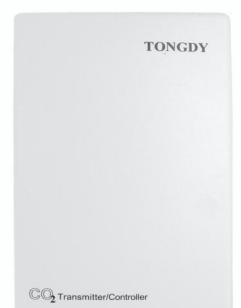
TSM-CO2 Series



TS21 Series



G01-CO2 Series



CO2 transmitter in the external sensor probe

- Real-time detecting air carbon dioxide, temperature or relative humidity
- Featured with LCD display, VOC's sensing options
- Optional the external CO2 sensor probe or split sensor probe
- Available in duct-mounted and wall-mounted types



TG9-CO2 Series



TGP-CO2 Series



CO2 MONITORS/CONTROLLERS

CO2 monitors/controllers can be used to detect indoor air quality with 3-color screen display and an available buzzer alarm.

They can control ventilators directly according to the end user's preset.

Applied for all public places such as schools, hospitals, airports and offices to ensure proper ventilation, and save the energy in HVAC systems.

Wall mounted and desktop model

- 💧 3-Color backlight display shows three CO2 ranges, buzzer alarm available.
- 💧 ON/OFF relay output to control a fan.
- 💧 RS485 interface in Modbus RTU
- 💧 VOC's sensing together is optional
- 💧 Perfect for indoor environment monitoring



CO2 controller in strong control functions

- 💧 TSP-CO2 and GX series with strong control functions
- 💧 CO2 and temperature and RH / TVOC monitoring
- 💧 Up to 3 linear analog outputs or PID outputs for different local application systems
- 💧 Up to three on/off relay outputs
- 💧 RS485 Optional
- 💧 Applied to ventilation systems, VAV terminal control, and other control systems



Plug & Play CO2 controller

- 💧 Control CO2 temperature and relative humidity.
- 💧 Design for -Plug & play type optional
- 💧 Replaceable filter in the probe.
- 💧 External split sensor optional.
- 💧 Extremely easy to connect the power and control a fan or CO2 generator in greenhouses or mushrooms. A light sensor inside for auto changeover of day/night work mode.



Product Name	Picture	Power supply	Output	Application	Features
TSM-CO2 CO2 sensor/transmitter		24VAC/VDC	-Modbus RS485 -An analog output (0-10VDC or 4-20mA)	-HVAC systems -BAS systems -Ventilation systems	-NDIR CO2 sensor with self-calibration and 15 years lifetime - Optional 6 LED lights indicate six CO2 ranges -Simple and low cost
G01-CO2-B10C/30C CO2 /CO2+Temp.+RH /CO2+TVOC Sensor&transmitter		24VAC/VDC	-Up to 3 linear analog outputs (0-10VDC or 4-20mA) -RS485(Modbus or BACnet)	-HVAC systems -BAS systems -Ventilation systems -IAQ detection	-3 in 1 CO2 sensing. - Temperature +RH or CO2 plus TVOC detection. -NDIR CO2 sensor with self calibration and 15 years lifetime.
TSP-21 CO2 or CO2+Temp./RH Sensor&transmitter		24VAC/VDC	-One or two analog outputs (0-10VDC or 4-20mA) -RS485 (Modbus RTU)	-HVAC systems -BAS systems -Ventilation systems	-NDIR CO2 sensor with self-calibration and 15 years lifetime - LCD display -Simple and low cost
TG9-CO2 In duct CO2 /CO2+Temp.+RH /CO2+TVOC Sensor&transmitter		24VAC/VDC	-Modbus RS485 -Up to 3 analog outputs (0~10VDC or 4~20mA) - Optional LCD	-HVAC systems -BAS systems -Ventilation control systems	-In duct air CO2 detection -NDIR CO2 sensor with self calibration and 15 years lifetime. - Optional Temp. & RH or TVOC measurement.
TGP-CO2 CO2 / CO2+Temp. +RH With the External sensor probe Sensor&transmitter		24VAC/VDC	-Modbus RS485 --Up to 3 analog outputs (0~10VDC or 4~20mA)	-HVAC system -Ventilation control system -Subway or train stations -Public places	-NDIR CO2 sensor with self calibration and more than 10 years lifetime. -Ensure temperature detection is not affected by internal heating -Split sensor probe available
G01-CO2-B3 Monitor/controller		100~240V /24VAC/VDC / USB 5V / battery- power	-3 color backlit for three CO2 ranges -a buzzer alarm available -Optional one 5A relay output and RS485 -Optional WiFi	-Schools, offices, hospitals, stores -Any public places -All ventilation systems	-Real time monitoring room CO2, temp.&RH. -NDIR CO2 sensor with self calibration and 15 years lifetime. -Buzzer alarm turning on/off -Wall mounting or desktop placement

Product Name	Pictures	Power supply	Output	Application	Features
GX-CO2 Monitor/Controller		24VAC/VDC Or 100-230VAC	-Modbus RS485 -Up to three relay outputs -Up to three analog outputs with linear output or PID control output	-Ventilation systems -VAV room control by both CO2 and Temp. -IAQ detection	-Designed for CO2/Temp. or CO2/TVOC detection. -NDIR CO2 sensor with self calibration and up to 15 years lifetime. -Strong on-site setting for different applications
TSP-CO2 Controller		24VAC/VDC	-Two analog outputs (0-10VDC or 4-20mA) -PID control output selected for CO2 -One relay on/off output, max current 5A (230VAC/30VDC) -Modbus RS485	-Ventilation systems -VAV room control	-Designed for real time measuring CO2 and temperature and relative humidity -NDIR infrared CO2 sensor inside with special Self Calibration. Up to 10 years lifetime -OLED display optional -Buzzer alarm for the relay control models
TKG-CO2 Controller		24VAC/VDC Or 100-240VAC	-Modbus RS485 -One 8A Relay on/off output	-Ventilation control -CO2 laboratory -Greenhouse and other similar applications	-Design for control the CO2 temperature and relative humidity. -Plug & play type optional -Replaceable filter in the probe. -External split sensor optional.
TKG-CO2 Plug&play Controller		100-240VAC	-One 8A Relay on/off output	-Greenhouse, hydroponics, gardens, horticulture, and other similar applications	-Design for control the CO2 -Plug & play type -A light sensor inside for auto changeover of day/night work mode. -Replaceable filter in the probe. -A down probe or split sensor.

For more CO2 and IAQ products and customization service please contact by email info@tongdy.com or contact with our sales.

Tongdy

Carbon Monoxide & Ozone Detector and Controller



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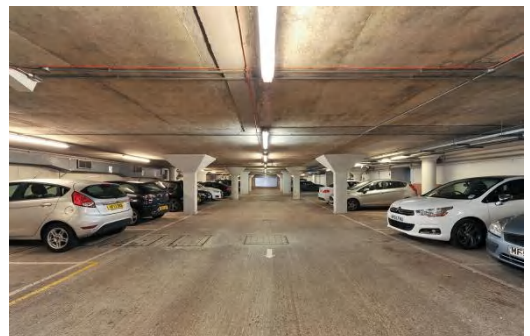
CO SENSORS AND CONTROLLERS

Tongdy's CO sensors/controllers are designed for real-time measuring air carbon monoxide, optional temperature and relative humidity.

The outputs of linear analog and the relay are used for DDC/PLC or ventilation control.

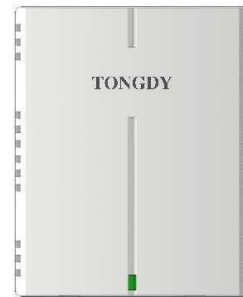
RS485 interface is optional with Modbus RTU or BACnet MS/TP, also WiFi communication is an option.

Tongdy's carbon monoxide products are applied for underground parking lots, indoor garage, tunnel, subway, restaurant, kitchen rooms, BMS systems and other public places.



CO TRANSMITTER

- High quality with cost-effective
- Electrochemical CO sensor with more than five years lifetime
- 0~10V/4~20mA output



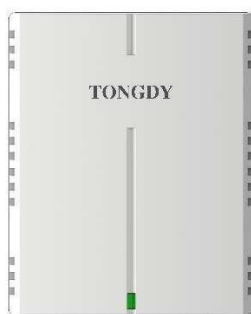
TSP-CO



TSM-CO

CO DETECTOR AND CONTROLLER

- Carbon dioxide controller with temperature option
- Electrochemical CO sensor with 5 years lifetime
- Buzzer alarm optional
- Linear analog output of CO measurement
- 1 or 2 ON/OFF relay outputs for ventilation control
- Modbus RTU or BACnet MS/TP optional
- WiFi communication optional
- Provides zero-point calibration and a replaceable CO sensing module



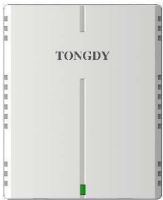
TSP-CO Series



TKG-CO Series



GX-CO Series

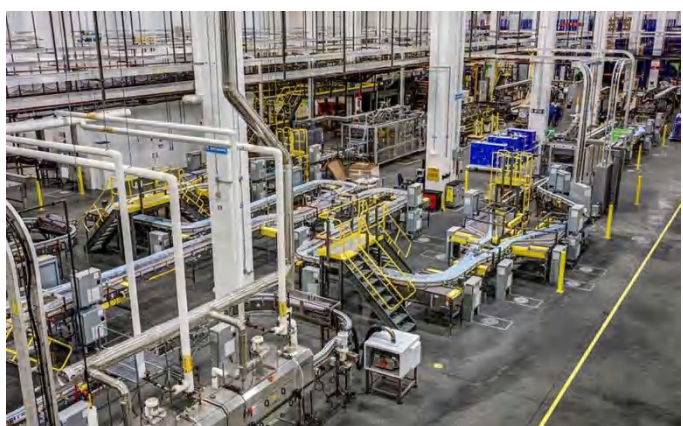
Product name	Picture	Power supply	Output	Application	Features
TSM-CO CO transmitter		24VAC/VDC	-Modbus RS485 -Analog output (0-10VDC or 4-20mA)	-Underground parking lots -Indoor garage -HVAC systems -Ventilation systems	-Good linear feature electrochemical sensor -Simple and low cost -5 years lifetime
TSP-CO CO sensor/controller		24VAC/VDC	-RS485 (Modbus or BACnet) -Analog output (0-10VDC or 4-20mA) -Up to 2 ON/OFF relay outputs	-Underground parking lots -Indoor garage -Subway stations -HVAC and ventilation systems	-Electrochemical sensor with 5 years lifetime -Buzzer alarm available for relay models -OLED display optional -Zero-point calibration -Replaceable CO sensing module
TKG-CO CO controller with an external sensor probe		24VAC/VDC	-RS485 (Modbus or BACnet) -An analog output (0-10VDC or 4-20mA) -Up to 2 ON/OFF relay outputs	-Underground parking lots -Basement parking -Tunnel -Subway -Ventilation systems	-Electrochemical sensor with 5 years life time -Optional temp. & RH detection -LCD display optional -Zero-point calibration and a replaceable CO sensing module
TSP-CO-W CO controller with WiFi		24VAC/VDC or 100-230VAC	-WiFi communication -Extra Modbus RS485 interface	-Detect and upload room carbon dioxide -HVAC systems -BMS and green buildings	-Electrochemical sensor with 5 years lifetime -Temp. & RH compensation -OLED display optional
GX-CO CO controller		24VAC/VDC	-1x0~10VDC/4~20 mA output -2xrelay outputs -RS485 in Modbus RTU	-Underground parking lots -Basement parking -Tunnel -Subway -Ventilation systems	-Electrochemical sensor with 5 years lifetime -Optional temperature -Strong control functions by presetting -Zero-point calibration -Replaceable CO sensing module

OZONE MONITOR AND CONTROLLERS

Tongdy's ozone monitors/controllers are designed for real-time measuring and control ozone concentration in air, optional temperature and relative humidity.

The analog output and the relay output for ozone concentration control. Optional RS485 with Modbus RTU, and WiFi for data gathering.

Tongdy's ozone products are applied for sterilization and disinfection in hospital, workshop and labs etc, fruit and vegetable fresh-keeping, and pest control in greenhouse.



Ozone Monitor/Controller

- G09-O3, TSP-O3 and TSP-O3W series
- Ozone controller with optional temp. & RH detection
- Excellent ozone electrochemical sensor inside with up to 5 years lifetime
- LCD display optional
- Buzzer alarm available
- An linear analog output
- ON/OFF relay output for ozone generator control or ventilation control
- Modbus RS485 optional
- Wifi communication optional for data gathering
- Zero-point calibration
- Replaceable ozone sensor module



G09-O3 Series



TSP-O3/TSP-O3W Series

Product name	Picture	Power supply	Output	Application	Features
G09-O3 Ozone monitor/controller with 3-color backlight LCD		24VAC/VDC	-Modbus RS485 -Analog output (0-10VDC or 4-20mA) -Up to 2 ON/OFF relay outputs	-Sterilization and disinfection -Fruit and vegetable fresh-keeping -Pest control in greenhouse	-Ozone, Temp. & RH detection -Buzzer alarm available -3-color backlight LCD display 3 levels of Ozone concentration -Power adaptor optional -Remote control mode optional
TSP-O3 Ozone controller		24VAC/VDC	-Modbus RS485 -Analog output (0-10VDC or 4-20mA) -An ON/OFF relay outputs	-Sterilization and disinfection -Fruit and vegetable fresh-keeping -Pest control in greenhouse	-Optional Temp. & RH detection -Buzzer alarm available for relay models -OLED display optional
TSP-O3W Ozone controller with WiFi communication		24VAC/VDC or 100-230VAC	-WiFi communication -Extra Modbus RS485 interface	-BMS and ventilation systems -Green buildings	-Ozone detection with Temp. & RH optional -Online upload ozone data to a service and displaying on dashboard

Other Tongdy's monitors of TVOC and PM2.5/PM10, please visit our website to find product information, or contact our sales.

Tongdy

Temperature & Humidity Transmitter and Controller
VAV Room Thermostat
Floor Heating Thermostat
Dew-proof Thermostat



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Temperature & Humidity Transmitter/Controller

Tongdy's temperature and humidity transmitters/controllers are designed for real-time measuring air temperature and relative humidity.

These transmitters/controllers include wall mounting , air duct mounting and the external probe types.

The analog linear outputs are for temperature and humidity measurements.

The relay outputs are used to control a ventilator or an AC unit.

RS485 interface is optional with Modbus RTU.

WiFi and data logger is optional.

These products are applicable for traditional HVAC systems, BAS, IoT, smart home, stores and greenhouse etc.



TEMP. & RH TRANSMITTERS

- High accuracy with cost-effective
- 2x 0~10V/4~20mA outputs for Temperature and RH
- RS485 interface with Modbus RTU
- WiFi and data logger is optional
- Available LCD display
- Wall mounting, Duct mounting and External probe types are available



TSM-TH



THP



TH9

TEMP. & RH CONTROLLERS

- Air temperature and RH controller with high accuracy
- Split sensor probe available with up to 10 meter cable
- 2x 5A ON/OFF relay outputs, up to 4x5A relay outputs
- RS485 interface optional with Modbus RTU
- Plug and Play optional (16A max load)
- Customized temperature and humidity controller



F2000P-TH



TKG-TH



THP-Hygro

Product name	Picture	Power supply	Output	Application	Features
TSM-TH series Temp. & RH transmitter		24VAC/VDC	-Modbus RS485 -2x analog outputs (0-10VDC or 4-20mA) -WiFi and data logger	HVAC BAS Indoor T&RH Computer room Data center	-Simple and low cost -Long lifetime
THP series Temp. & RH transmitter with down probe		24VAC/VDC	-Modbus RS485 -2x analog outputs (0-10VDC or 4-20mA)	HVAC BAS Greenhouse	-High Accuracy -IP54 optional -Split sensor probe optional
TH9 series Duct type temp. & RH transmitter		24VAC/VDC	-Modbus RS485 -2x analog outputs (0-10VDC or 4-20mA)	HVAC BAS Ventilation	-High Accuracy -IP54 optional
F2000P-TH series Temp. & RH controller		24VAC/VDC Or 110VAC Or 230VAC	-2x 5A ON/OFF relay outputs -Modbus RS485 -Up to 4x5A relay outputs optional	HVAC BAS AC unit Stores	-User friendly -Blue backlight LCD optional -Split sensor optional
TKG-TH series Temp. & RH controller with down probe		24VAC/VDC Or 230VAC	-2x 5A ON/OFF relay outputs -Modbus RS485	HVAC BAS AC unit Stores Greenhouse	-Industrial structure -In-duct mounted optional -Split sensor optional
THP-Hygro series Humidity controller with plug and play		230VAC	-16A relay output	HVAC Mood-proof auto control Greenhouse	-Big current output -White backlight optional -Plug and play type -Mood-proof auto control -Humidifying or dehumidifying

Digital Thermostats

Thermostats shown below are several typical products among Tongdy's thermostats.

They can be used in room temperature and/or CO2 control of VAV systems, in room temperature control of FCU, AC and floor heating systems.

Provides option of RS485 with Modbus RTU or BACnet MS/TP.

These thermostats are applied for commercial and residential rooms , like hotel, living room, meeting room, office, classroom, hospital, fitness, restaurant and laboratories etc.



THERMOSTAT FOR VAV SYSTEMS

- VAV thermostat with one or two 0~10V PID output, and 1-stage or 2-stage electric aux. heater control
- Effective room temperature control for VAV systems
- Plus CO2 control together available.
- Optional RS485 interface with Modbus RTU or BACnet MS/TP protocol.



THERMOSTAT FOR FLOOR HEATING

- Room temperature control of electric diffusers & floor heating systems.
- Both Internal and external sensor are available to control room temperature and set a highest limit of the floor temperature
- Temporary temperature override and low temperature protection
- Two parts design makes electric load separate from the thermostat. Individual output and input terminals with rated 16amp make the electric connecting more safe and reliably.
- 7-day programmable, with 4 time periods corresponding to 4 control temperature values.
- RS485 Communication interface optional



DEW-PROOF THERMOSTAT

- Designed for floor hydronic radiant cooling/heating AC systems with floor dew - proof control.
- Floor temp. limit in heating mode and an external sensor for floor temp.
- Auto - calculates dew point in cooling systems; user - preset room/floor temp & humidity.
- Heating mode: humidity control and floor overheat protection.
- 2 or 3 on/off outputs for water valve/humidifier/dehumidifier.
- 2 cooling control modes: room temp/humidity or floor temp/room
- Pre - set temp/humidity differentials for optimal system control.
- Pressure signal input for water valve control.
- Selectable humidify/dehumidify modes.
- Optional infrared remote control and RS485 communication interface.

