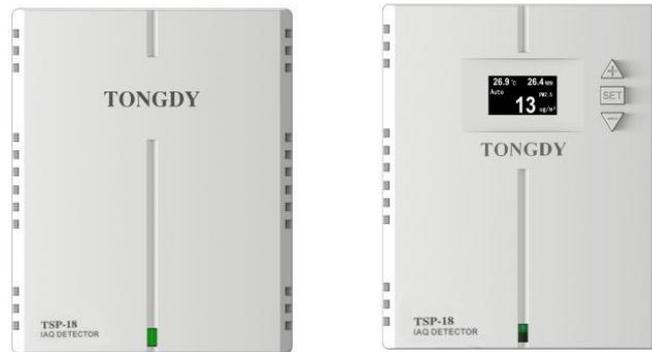# Tongdy

Tongdy Sensing Tech.

TSP-1836 CO2 Monitor
—With RJ45 & PoE

CE RoHS

- Real-time CO2 monitoring, also temperature and RH
- Optional real-time TVOC monitoring
- 3-color light indicates three ranges of CO2 measurement
- OLED display optional
- Applied in schools, offices , hotels and residential projects
- RJ45 communication interface

Features

- 24/7 hours online real-time monitoring of CO2, temperature and humidity
- NDIR CO2 sensor with self-calibration and 15-year service life
- 3-color indicator light shows three CO2 measurement ranges
- Optional TVOC monitoring

- Built-in dedicated correction algorithm ensures TVOC measurements are unaffected by environmental changes
- Optional OLED display
- Ethernet RJ45 interface
- 24VAC/VDC or 48V POE power supply
- CE approved

Applications

- Schools , hotels, offices and other public premises

- Smart home systems
- Residential projects
- Air quality monitoring systems
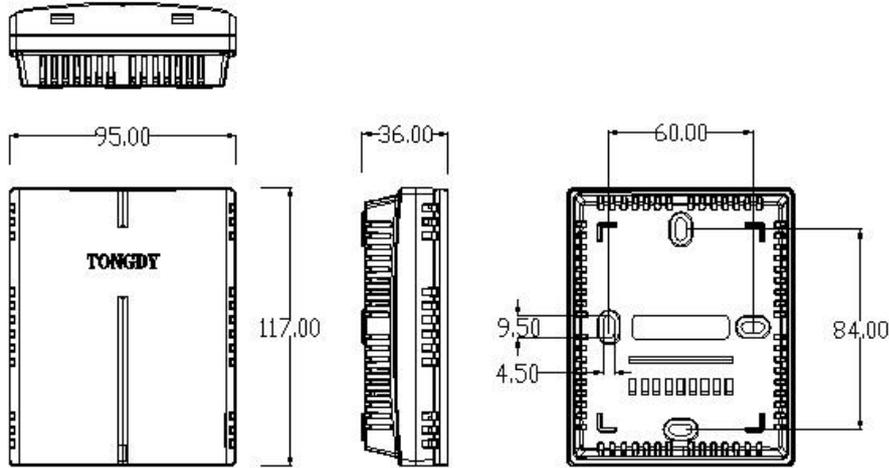- All ventilation systems

Specifications

General Data	
Output	RJ45 (Ethernet TCP)
Operating Environment	Temperature：-20-60℃　　Humidity：0-99%RH
Storage conditions	-5℃-50℃　　Humidity：0-70%RH (No condensation)
Power supply	24VAC±10%, or 18-24VDC 48V PoE
Overall Dimensions	94mm(L)×116.5mm(W)×36mm(H)
Housing Material & IP Rating	PC/ABS fire-proof material /　　IP30
Installation	Recessed installation：65mm×65mm junction box Surface-mounted: optional a mounting bracket
CO_2 Data	
Sensor	Non-Dispersive Infrared Detector (NDIR)
Measuring Range	400-5000ppm
Output Resolution	1ppm
Accuracy	±50ppm +5% of reading at 400-2000ppm
TVOC Data	
Sensor	TVOC module
Measuring Range	1-2000ug/m3（0.001~2mg/m3)
Output Resolution	1ug/m3　(0.001mg/m3)
Accuracy	±20ug/m3 (±0.02mg/m3) + 15% 　(0-500ug/m3/0~0.5mg/m3, 10%-80%RH @ 25℃)
Temperature and Humidity Data	
Sensor	High precision digital integrated temperature and humidity sen
Measuring Range	Temperature：0-60℃ / Humidity：0-99%RH
Output Resolution	Temperature：0.01℃ / Humidity：0.01%RH
Accuracy	Temperature：±0.6℃ @25℃ Humidity: ±4.0 %RH　（20%-80%RH）

Models Guide

Model	CO2	Temp. & RH	TVOC	Power supply	Power supply	Interface
TSP-1836C	●	●		24V		Ethernet (MQTT protocol)
TSP-1836-PoE	●	●			PoE 48V	
TSP-1832C	●	●	●	24V		

TSP-1832-PoE	●	●	●		PoE 48V	
-SL suffix	OLED display					

Mounting and Wiring

Mounting Bracket Diagram (for surface-mounted installation)