Taidacent CO2 Gas Sensor Transmitter Controller Carbon Dioxide Monitor Detector PLC Modbus RS485 0-5V 0-10V 4-20ma Analog 400~5000ppm (4 to 20mA CO2 2000ppm)

1 Product Overview

The transmitter is widely used in agricultural greenhouses, flower cultivation and other occasions that require CO2 and temperature and humidity monitoring. The input power supply in the sensor, the sensor probe, and the signal output are completely isolated. It is safe and reliable, beautiful in appearance and easy to install.

2 Features

This product uses a high-sensitivity gas detection probe with stable signal and high accuracy. It has the characteristics of wide measuring range, good linearity, easy to use, easy to install, and long transmission distance.

3 Main Parameters

Power supply: 10~30V DC (0~10V type can only supply 24V)

Power consumption: 0.3W (24VDC)

CO2 measurement range: 400~5000ppm (customizable)

CO2 accuracy: ±(40ppm+ 3%F·S) (25℃) Stability: <2%F·S

Non-linearity: <1%F·S Data update time: 2s
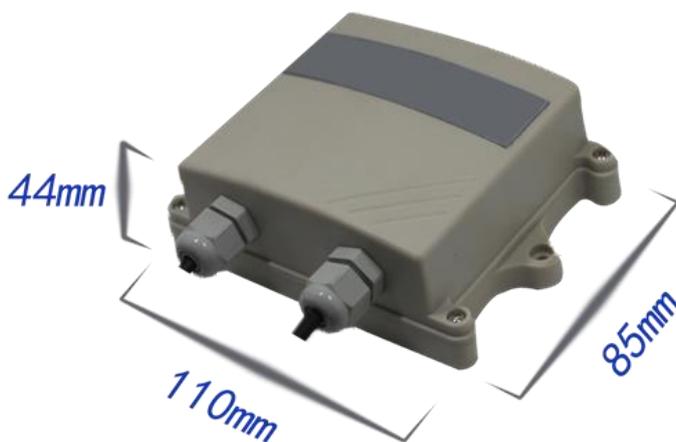
System warm-up time: 2min (available), 10min (maximum accuracy) Average current: <85mA

Temperature influence: self-contained temperature compensation Output signal: 4~20mA, 0~5V, 0~10V

Working environment: -10~+50℃, 0-80%RH (non-condensing)

Response time: generally less than 90S at 90% step change

Overall size: 110×85×44mm

4 Current Output Signal Conversion Calculation

For example, the range is 0~5000ppm, 4~20mA output, when the output signal is 12mA, calculate the current CO2 concentration value. The span of this CO2 range is 5000ppm, expressed by a 16mA current signal, 5000ppm/16mA=312.5ppm/mA, that is, the current 1mA represents the CO2 concentration change 321.5ppm, the measured value is 12mA-4mA=8mA, 8mA*312.5ppm/mA=2500ppm , The current CO2 concentration is 2500ppm.

5 Sensor Wiring

Brown: Power+ (10-30V DC)　　　　Black: Power-　　　　Blue: CO2 Signal +　　　　Green: CO2 Signal –