CCT-100

INTELLIGENT INFRARED CO2 IDICATOR / TRANSMITTER

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CCT-100

MAIN FEATURES

- Non-dispersive infrared (NDIR) Co2 Sensing device
- *Co2 measuring range is 0-5000 PPm (typical) with Temperature compensation. Measuring range Could be changed to 0-10000 ppm if specified.*
- *Two Output signals 0-5VDC (typical). Could be changed to 4-20 mA if specified*
- RS485 interface using the Modbus RTU command. (Optional).
- *Fully calibrated.*
- *Low power consumption*
- *Excellent long term stability*
- *Long life span > 5 years.*
- *High sensitivity, high resolution*
- *Excellent linear output*
- *Anti water vapor interference*
- *No poisoning*

DESCRIPTION

CCT-100 is an non-dispersive infrared (NDIR) , long life , small size advanced transmitter to detect the existence of Co2 in the air with temperature compensation.

CCT-100 is developed by the tight integration of mature infrared absorbing gas detection technology, precision optical circuit design and superior circuit design.

CCT-100 is factory calibrated . The calibration coefficients are stored in the transmitter's microcontroller memory, which are used by the sensor's internal signal detecting process.

CCT-100 is RS485 interface using the Modbus RTU command. (Optional).

Two 0-5VDC output signals (typical) . The first output is for Co2 concentration . The second output could be used tor the ambient temperature (0-100 oC) or ambient humidity (0-100% RH). This makes system integration quick and easy . (Could be changed to 4-20mA if specified) .

Its size, low power consumption long signal transmission making it the best choice for various applications such as HVAC , refrigeration , Indoor air quality monitoring/control , Smart home appliances , School , Air cleaner systems and others.

The **CCT-100** features a 2-line LCD display on the front cover for CO_2 concentration display.

The **CCT-100** offers possibility of Offset adjustment for CO_2 read out and output signal.

TECHNICAL DATA

Display
2-line X 16 Character LCD display

LCD Resolution
1 PPM CO_2 Concentration

Ranges
0-5000 PPm CO_2 Concentration (typical)

Accuracy
± 50ppm + 3% reading value

Life span
>5 year

Input Power
From 9VDC up to 30VDC

Digital Communication
RS485 interface using the Modbus RTU command. (Optional).

Output signal
0-5VDC for Co2 concentration .

Characteristic
Linear

Isolation voltage
500 Vac

Operating Range
0 – 50 °C
0~95% RH

Storage temp.
-40 – 70 °C

Pre-heating time
3 min typical

Response time

< 30s for 90% step change of CO_2 concentration

ELECTRICAL CONNECTIONS

Cable Connection

PIN 1 – Input Power . (9 – 30VDC)

PIN 2 – Ground

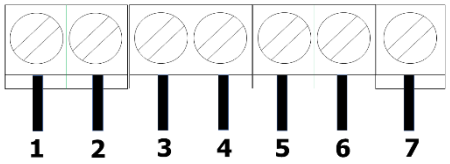
PIN 3 – 0-5VDC output for Co2 concentration

PIN 4 –

PIN5 - Ground

PIN6 – RS485 (B)

PIN7 – RS485 (A)



OFFSET PROGRAMMING

Open the top cover you shall be able to see the two programming push buttons

Buttons:

- "Λ+V" *Press both to enter setting mode or to SAVE*
- "V" *Decrease the value*
- "Λ" *Increase the value*

Enter Password

- Press "Λ+V" , display shows "1230".
- Press"Λ" to change password to "1234"
- Press"Λ+V" together to enter
- (Press Λ+V twice or enter wrong password will logout setting mode.)

CO2 Offset Setting

- Display shows "OFFSET".
- Press "Λ" to increase, press "V" to decrease.
- Press "Λ+V" to save and exit programing .

HOW TO ORDER

CCT-100 – AA – BB – CC – DD - EE

AA – CO_2 INDICATION RANGE , PLEASE WRITE DIRECTLY
- 0 – 5000 PPM (TYPICAL)

BB – CO_2 OUTPUT RANGE , PLEASE WRITE DIRECTLY

CC – OUTPUT SIGNAL
- 3WIRE , 4-20 MA (TYPICAL)
- 0 – 10 VDC
- 0 – 5 VDC
- OTHERS (PLEASE SPECIFY)

DD – SUPPLY VOLTAGE
- 12 VDC (TYPICAL)

EE – OPTIONS (PLEASE SPECIFY IN WRITING).
- RS485 interface using the Modbus RTU command .
- RELAY.
- OTHERS.