

COT-100 INTELLIGENT CO IDICATOR / TRANSMITTER





### MAIN FEATURES

- CO measuring range is 0-700 PPm (typical) with Temperature compensation
- 3 wire 4 20 mA Output signals (typical) for 0 700 PPm Co concentration.
- Output signal could be changed to o-10VDC if specified.
- Fully calibrated.
- Excellent ability of Anti-interference
- Low power consumption
- Excellent long term stability
- Long life span > 5 years.
- High sensitivity, high resolution
- Excellent linear output
- Offset programming stored in internal Eprom memory.

#### DESCRIPTION

**COT-100** is a general-purpose and miniaturization electrochemical carbon monoxide detection Transmitter.

**COT-100** utilizes electrochemical principle to detect CO in air which makes the module with high selectivity and stability, Built-in temperature sensor for temperature compensation.

**COT-100** is a combination of mature electrochemical detection principle and sophisticated circuit design.

**COT-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.

3 wire 4-20 mA output signals (typical) for CO concentration from 0 – 700 PPM .. This makes system integration quick and easy . (Could be changed to 0-10VDC 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 **COT-100** features a 2-line LCD display on the front cover for CO concentration display.

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



## TECHNICAL DATA

### <u>Display</u>

2-line X 16 Character LCD display with backlight

<u>LCD Resolution</u> 1 PPM CO Concentration

<u>Ranges</u> o-700 PPm CO Concentration

<u>Accuracy</u> ±5 PPM or 5% of reading

<u>Life span</u> >5 year

Input Power From 12VDC up to 30VDC

## <u>Output signal</u>

3 wire 4 – 20 mA for CO concentration from 0 – 700 PPM (Typical) Output may be 0-10 Vdc voltage signal (optional)

## Response time

< 6os for 90% step change of CO concentration

<u>Coverage Area</u> 600 m2

<u>Characteristic</u> Linear

<u>Isolation voltage</u> 500 Vac

<u>Operating Range</u> o - 50 °C - o~95% RH (No condensation)

<u>Storage temp.</u> -40 – 70 °C

<u>Pre-heating time</u>

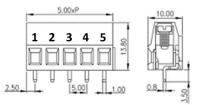
3 min typical



## ELECTRICAL CONNECTIONS

#### **Cable Connection**

- $\mathsf{PIN}\, \mathtt{1}-\mathsf{Ground}$
- PIN 2 Input Power . (12 30VDC)
- PIN 3 Ground
- PIN 4 4-20 mA Output (0 700 PPm CO)
- PIN 5 Spare



## OFFSET PROGRAMMING

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

#### **Buttons:**

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

#### Enter Password

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

## CO Offset Setting

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



# HOW TO ORDER

#### COT-100 - AA - BB - CC - DD - EE

AA – CO INDICATION RANGE , PLEASE WRITE DIRECTLY 0 – 700 PPM (TYPICAL)

BB-CO 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)