CW Protocol Series

CWLP

CWXP

Individual or 3-in-1 with Modbus & BACnet Protocol

FEATURES

- Embedded BACnet and Modbus communication protocols...easy systems integration
- Configurable to multiple baud rates...transfer data at the right speed for the system
- CO_2, humidity, & temperature sensors in one device at one address...provides more information & maximizes system capacity
- Local feature override capability from the building control system...added control and flexibility
- Innovative self-calibration algorithm...maximizes performance
- Field calibratable...minimize downtime
- Available with 2% NIST or 2% standard RH

DESCRIPTION

CW Protocol Series is a non-dispersive infrared (NDIR) sensor designed for measuring CO_2 concentration in ventilation systems and indoor living spaces. Its measurement range of 0-5000 ppm makes it the premier solution for meeting ASHRAE and other ventilation efficiency standards.

CW Protocol devices feature embedded BACnet and Modbus communication protocols, as well as optional temperature and humidity sensors. An adjustable setpoint relay is provided for direct control and alarm applications, and the optional setpoint slider and pushbutton override offer additional local input.

APPLICATIONS

- Controlling ventilation in response to occupancy
- Office buildings, schools, or other systems utilizing BACnet or Modbus protocol

SPECIFICATIONS

Input Power	Class 2; 12 to 30VDC, 24VAC 50/60Hz; 100mA max.
Operating Temp Range	No humidity option: 0° to 50°C (32° to 122°F); With humidity option: 10° to 35°C (50° to 95°F)
Operating Humidity Range	0-95% RH non-condensing
Housing Material	High impact ABS plastic, UL 94 V0
Terminal Block Torque	0.22N-m (2.0 in-lbf) max.
Terminal Block Wire Size	30-18 AWG (0.08-0.5mm²)
Protocol	BACnet or Modbus (selectable)
Connection	2-wire RS-485
Data Rate	9600, 19200, 38400, 57600 (Modbus), bps (selectable); 9600, 19200, 38400, 76800 (BACnet), bps (selectable)
Parity	None/Odd/Even (selectable-Modbus); None (BACnet)
Address Range	1-127
Setpoint Slider Resolution Option	1% full scale
Override Button Option	Remotely readable and resettable
CO_2 TRANSMITTER	
Sensor Type	Non-dispersive infrared (NDIR) diffusion sampling
Measurement Range	0-5000 ppm
Accuracy	±30 ppm ±2% of measured value*
Repeatability	±20 ppm ±1% of measured value
RH TRANSMITTER OPTION	
HS Sensor	Replaceable digitally profiled thin-film capacitive ; (32-bit mathematics); U.S. Patent 5,844,138
Accuracy**	±1% from 12 to 60% RH; ±2% from 10 to 80% RH; NIST traceable multi-point calibration
Reset Rate***	24 hours
Stability	±1%@ 20°C (68°F) annually for two years
Hysteresis	1.5% typical
Temperature Coefficient	±0.1% RH/°C above/below 25°C (typical)
TEMPERATURE TRANSMITTER OPTION	
Sensor Type	Solid-state, integrated circuit
Accuracy	±0.5°C (±1°F) typical
Resolution	0.1°C (0.2°F)
Range	10° to 35°C (50° to 95°F)
RELAY CONTACTS	
1 Form C (SPDT)	1A@30VDC, resistive; 30W max.

EMC Conformance: Low voltage directive 2006/95/EC & EMC directive 2004/108/EC.
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1:2007 specification requirements)
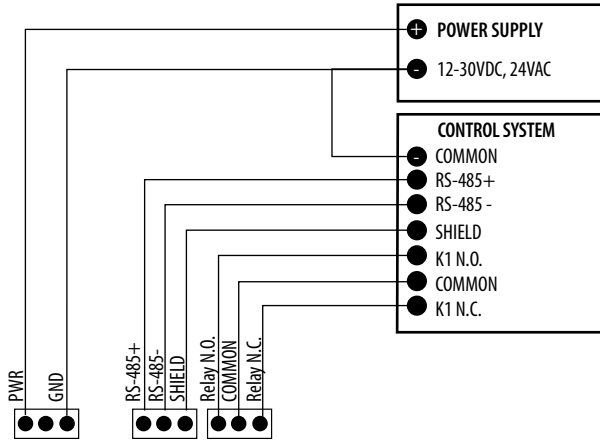* Measured at NTP
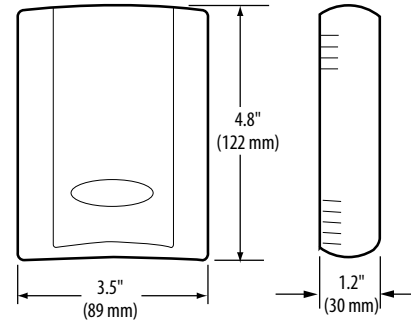** Specified accuracy with 24VDC supplied power with rising humidity.
*** Reset rate is the time required to recover to 50% RH after exposure to 90% RH for 24 hours.
Note: Rough handling and transportation may cause a temporary reduction of CO_2 sensor accuracy. With time, the ABC function will tune the readings back to the correct accuracy range. The default tuning speed is limited to 30 ppm per week.

iSweek   www.isweek.cn
公司名: 深圳市工采网络科技有限公司   地址: 广东省深圳市南山区高新南一道中国科技开发院3号楼16层
电话: + 86-755-83289036   传真: + 86-755-83289052   邮箱: sales@isweek.cn

WIRING DIAGRAM

- POWER SUPPLY
- 12-30VDC, 24VAC

CONTROL SYSTEM
- COMMON
- RS-485 +
- RS-485 -
- SHIELD
- K1 N.O.
- COMMON
- K1 N.C.

PWR GND

RS-485+ RS-485- SHIELD Relay N.O. COMMON Relay N.C.

DIMENSIONAL DRAWING

4.8"
(122 mm)

3.5"
(89 mm)

1.2"
(30 mm)

ORDERING INFORMATION

CE

CW

Local Display	Protocol	RH Option	Temp. Option	Temp Cal. Cert.	Option	Housing
L = LCD **X** = No Display	**P** = Protocol	**X** = No RH **2** = RH 2% NIST **H** = RH 2%	**X** = No Temp **T** = Temp Transmitter	**X** = None **1** = 1 pt. cal. cert.* **2** = 2 pt. cal. cert.* **3** = 3 pt. cal. cert.*	**Blank** = None **1** = Pushbutton override **2** = Set point slider **3** = Pushbutton override + setpoint slider	**Blank** = Cloud white **B** = Black

Only available if temperature option is selected.

Example:

CW	L		P	H	T	X	3

ACCESSORIES

Duct Aspiration Box and Outdoor Aspiration Box (AA35)
Calibration kits and gases (AA01, AA26, AA27, AA28, AA29)
Handheld air quality testers (1010, 1008, 770)
Replacement covers and housing for wall units (AA51, AA51B, AA52, AA52B, AA55)

1010   AA01   AA35   AA55   AA51/AA51B   AA52/AA52B