OMICRON

CDWN CO$_2$ TRANSMITTER

WALL MOUNTED CARBON DIOXIDE TRANSMITTER

⚙ Applications:

Omicron carbon Dioxide transmitters are designed for environment monitoring and controlling in industrial and commercial buildings. These transmitters can be used for:
* Air monitoring of supply, exhaust and return air
* Air monitoring in critical environment such as outside air
* Other applications of combustion measurement

⚙ Features:

* High performance semiconductor sensors and circuits, ensure accurate measurement and temperature compensation
* Good long term stability and reliability
* 15 Years Sensor Life
* Fast response
* Digital technology applied, multiple output optional, over voltage and reverse polarity protection, high reliability and interference capability
* Fast Response

⚙ Specifications:

Carbon Dioxide Transmitter

Sensor	:	NDIR
Range	:	0~2000 ppm
Output	:	4~20mA
		0~10VDC (Jumper Settable)
Communication	:	Optional Modbus RS485 RTU
Accuracy	:	±5% of F.S (Optionally available for ±3%)
Hysteresis	:	<±1% of F.S
Response time	:	<10s (25°C,in slow air)
Sampling Time	:	1s
Drift	:	<±0.5% of F.S
Power	:	16 - 28 VAC (4 wires) / 16 - 36 VDC
Output Load	:	500 (current), >2K (voltage)
Temperature Limit	:	-20~80°C
Storage Temperature	:	-40~100°C
Housing	:	Fireproof ABS Enclosure
Display	:	Optional LCD Display
Area Of Coverage	:	300 m^2 (optionally available upto 750 m^2)
Agency Approval	:	CE
Calibration Protocol	:	COML
Ingress Protection	:	IP32; (Optionally Available for IP54)

CE

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⚙ Dimensions (unit : mm):

83   25   80.5

115   60   30   84

30.6   ⌀4   ⌀22
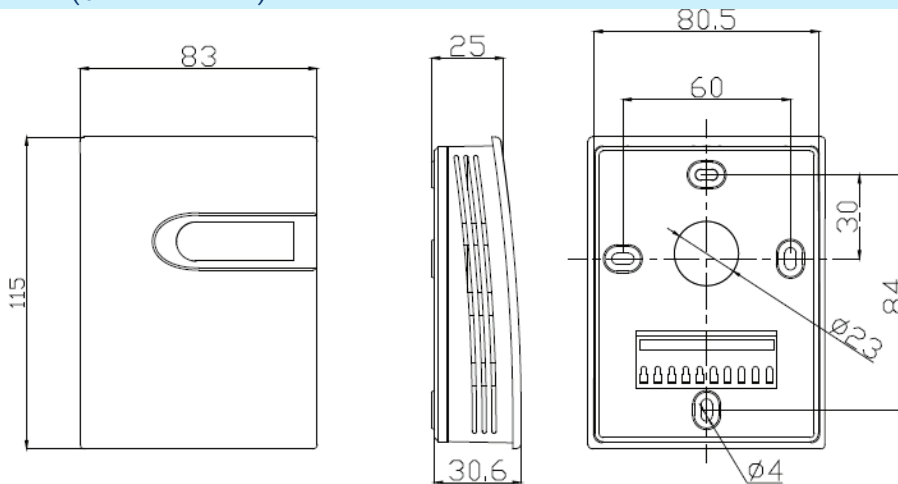
⚙ Wiring Method :

Different models have different electrical terminals. Please wire specific model according to the wiring diagram inside the front cover.

GND	V	I
1	2	3

V (0···10V)   A (4···20mA)

GND

24V	GND
5	6

+   − 24VDC / 24VAC
POWER SUPPLY

A	B
9	10

A   B

RS485
9600,N,8,1
Slave Add.= 1
J8 120Ω
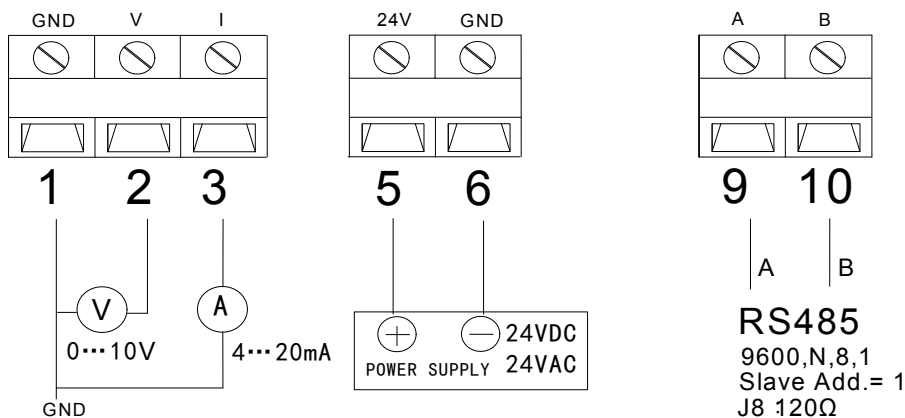
RS485/Modbus communication refers to "CDN series carbon monoxide transmitter Modbus communication instruction".
RS485 terminal resistance jumper J8 description:
Terminal resistance 120Ω：left short J8 pin1 and pin2.
Terminal resistance None：right short J8 pin2 and pin3.
As following figure:

120   120

J8 ●●○   J8 ○●●

Terminal resistance：120 Ω   Terminal resistance：None
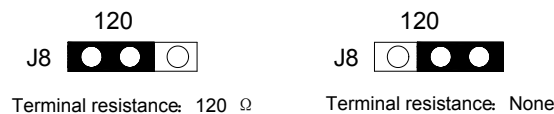
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HOW TO ORDER

⚙ **Basic Model:** CDWN

CDWN

⚙ **Accuracy:** 0

0	±5%	1	±3%

⚙ **Output:** 1

1	Analog Output (4-20mA / 0-10VDC)	B	Modbus RS485RTU + Analog Output (4-20mA / 0-10VDC)

⚙ **Display:** 0

0	Without Display	1	LCD Display
2	With Display and Touch Keys		

⚙ **IP Rating:** 1

-	IP 32
1	IP54

Ordering Example : CDWN010

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