Automation

Model JQBW-8

Wall Mount Dust Sensors

DESCRIPTION

The wall-mounted JQBW-8 series dust sensors are low profile, unobtrusive, and designed for installation in any space or conference room. It takes count of the dust number in a liter of air automatically. The transmitter controller includes analog output (0-5V or 4-20mA), a mounting/wiring sub-base, and a Lifetime Calibration Guarantee. All JQBW-8 series sensors offer a SPDT relay (normally open or closed) and can be custom programmed to a specific measurement and output range using the software interface or on-board keypad (display units).

FEATURES

• *user setup 3 dust diameter (*1μm, 2μm or 2.5μm*)*

• *±10% accuracy*

• *128x64 dot LCD display with blue back*

• *wall-mounted installation easily*

• *4-20mA, 0-5Vdc, RS-232/485 and relay outputs*

ORDER CODES

JQBW-8		
I1	Current 4ma to 20mA	
V1	Voltage three-wire 0 - 5VDC	
V2	Voltage three-wire 0 - 10VDC	
W1	RS-485(max 127 nodes, 1.2km)	
W2	RS-232	
S1	>1μm	
S2	>2μm	
S3	>2.5μm	
R1	1 relay output	
R2	2 relay output	

PERFORMANCE SPECIFICATIONS

Supply voltage	24VDC (18-30V)
Power	Normal 42mA, maxim 100mA
Range	0-8.8K/L, or 7.1-9.0 Cleanliness (ISO14644-1 standard)
Accuracy (25℃)	±10%
Dust diameter	>1μm >2μm >2.5μm
Output	Current: 4 to 20mA (Load < 500Ω) Voltage: 0-5V/10VDC (Load > 1KΩ) Communication: RS-485/RS-232 Relay: 2 (2A/30VDC, 0.4A/125VAC)
Response time	<1min (0-90%RH)
Long-term stability	Temperature: <0.1℃/year
Operating environment	0-50℃，5%RH~95%RH
Display dimension	54mm x 45mm (128x64 dot LCD)
Mounting dimension	180mm x 130mm x53mm (White Color ABS)

ELECTRICAL CONNECTION

Supply and analog outputs connection

Code	Red	Yellow	Black
I1	+24V	signal	GND
V1	+24V	signal	GND

Communication connection

Code	TX	RX
W1	485+(A)	485-(B)
W2	232Tx	232Rx

Relay output connection

Code	NC	COM	NO
H-alarm	Normal close	Commonality	Normal open
L-alarm	Normal close	Commonality	Normal open

COMMUNICATION SPECIFICATIONS

Protocol

Data Format: 1 start bit, 8 data bit and 2 end bit.

Protocol type: MODBUS RTU (Hex data)

Addr	03	00	00	00	01	CRCH	CRCL

Example: If Addr=1 then

Command:

01	03	00	00	00	01	31	CA

Response:

01	03	02	DH	DL	CRCH	CRCL

Setting baud rate and communication address:

Please read the user manual of product.

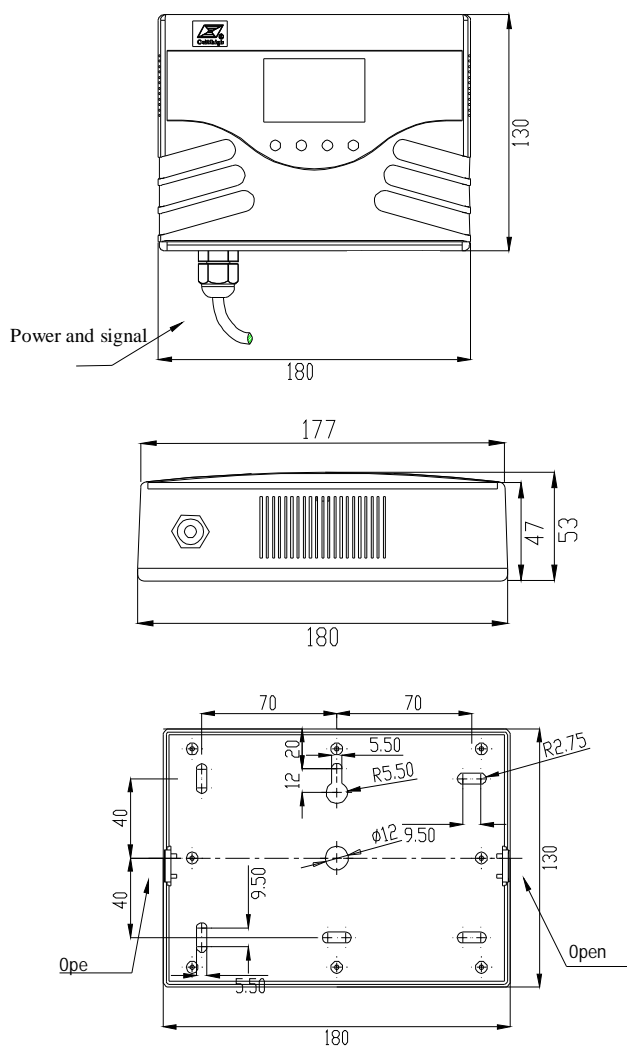### NOTES

Level	Dust number (K/Liter)
ISO7.1	0.1
ISO7.5	0.3
ISO8	0.7，0.8，
ISO8.1	0.9~1.0
ISO8.2	1.1~1.3
ISO8.3	1.4~1.6
ISO8.4	1.7~2.1
ISO8.5	2.2~2.6
ISO8.6	2.7~3.4
ISO8.7	3.5~4.3
ISO8.8	4.4~5.3
ISO8.9	5.4~6.7
ISO9	6.8~8.8

• *The transmitter should be installed in a steady area , avoid from direct sunshine, kept away from windows, air conditioning and central heating system etc. And it should not be installed on the wall which opposite the window or door in the room.*

• *The transmitter must be preventing from the chemical agent, oil, dust and dew, ice condition. And you must avoid using the product in the condition that temperature acuity.*

MOUNTING DIMENSION

Power and signal

Automation

Model JQAW-8

Wall Mount Smart CO2 Sensors

DESCRIPTION

The wall-mounted JQAW-8 series sensors are low profile, unobtrusive, and designed for installation in any office space or conference room. The transmitter controller includes a dual analog output (0-5V and 4-20mA), a mounting/wiring sub-base, and a Lifetime Calibration Guarantee. All JQAW-8 Series sensors offer a SPDT relay (normally open or closed) and can be custom programmed to a specific measurement and output range using the software interface or on-board keypad (display units).

PERFORMANCE SPECIFICATIONS

Supply voltage	24VDC (18-30V)
Power	Normally 50mA, maximal 100mA
Range	0-2000ppm, 0-5000ppm, 0-10000ppm
Accuracy (25℃)	40ppm+3%F·S
Output	Current: 4 to 20mA (Load < 500Ω) Voltage: 0-5V/10VDC (Load > 1KΩ) Communication: RS-485/RS-232 Relay: 2 (2A/30VDC, 0.4A/125VAC)
Response time	<1 min (0-90%RH)
Long-term stability	<1.0%/year
Operating environment	0-50℃，5%RH~95%RH
Display dimension	54mm x 45mm (128x64 dot LCD)
Mounting dimension	180mm x 130mm x53mm (White Color ABS)

FEATURES

• *0-2000ppm, 0-5000ppm and 0-10000ppm Range*

• *±3.0% accuracy*

• *128x64 dot LCD display with blue back*

• *wall-mounted installation easily*

• *4-20mA, 0-5Vdc, RS-232/485 and relay outputs*

ORDER CODES

JQAW-8			
	I1	Current 4ma to 20mA	
	V1	Voltage three-wire 0 - 5VDC	
	V2	Voltage three-wire 0 - 10VDC	
	W1	RS-485(max 127 nodes, 1.2km)	
	W2	RS-232	
		S1	0~2000ppm
		S2	0~5000ppm
		S3	0~10000ppm
		R1	1 relay output
		R2	2 relay output

ELECTRICAL CONNECTION

Supply and analog outputs connection

Code	Red	Yellow	Black
I1	+24V	Signal	GND
V1	+24V	Signal	GND

Communication connection

Code	TX	RX
W1	485+(A)	485-(B)
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Response:

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Setting baud rate and communication address:

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NOTES

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MOUNTING DIMENSION

Power and signal