Honeywell

Integrated Room Air Quality Sensor User Manual

HAQ21L/HAQ21BW/HAQ41L/HAQ41BW/ HAQ61L/HAQ61L-NL/HAQ61B/HAQ61BW

Please carefully read this Userbefore using this product

Thank you for purchasing and using this product. For your safety, rights and interests, please read this Usercarefully before using the product. If you fail to operate it according to the product manual or fail to follow the precautions, resulting in any personal injury, property or other losses, we shall not take any responsibility.

Precautions

To ensure correct use, please read the precautions carefully and be sure to follow them.

Warning: Ignorance of the warning contents is very likely to result in serious accidents such as Artificial solution of the transport of the state of

- wiring you must disconnect nower
- withing you must disconnect power.

 Before cleaning or maintenance, please switch off the power. Do not wash it with water, for there is a risk of electric shock.

 Do not operate with wet hands, for there is a risk of electric shock.
- Do not directly spray with insecticides, disinfectants, and flammable spray materials. Otherwise, a fire or device deformation may be caused.

 Do not peel off the buttons and LCD cover plate with your hands, for there is a risk of
- electric shock.
- Make sure the sensor is suitable for your equipment before installation.
 After installation, please test for normal use.

List of items Please check whether the product is in good conditions and whether the accessories are

complete atter unpacking.	
Item	Qty
Integrated Room Air Quality Sensor	1
UserGuide	1
Certificate of conformity	1
M4×35 cross recess pan head screw	2
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Product Overview







Instructions for Use of Buttons

Function	Operation method
Screen ON	Short-press it (<1s) to switch on the screen when the screen is off
Screen OFF	Short-press it (<1s) to switch off the screen when the screen is on
Parameters display	Short-press it (>1s) to display the current 485 address and baud rate when the screen is on
Parameters reset	Long-press it (>5s) to reset the device 485 address to 1 and baud rate to 38400 when the screen is on

Measurement Interface

The measurement value interfaces are automatically switched at an interval of 5 seconds.



HAQ41L

The measurement value interfaces are automatically switched at an interval of



Dual screens are displayed in rolling, and the measurement value interfaces are automatically switched at an interval of 5 seconds.



Interface for PM2.5 temperature and humidity PM10 and PM1.0 Concentration Level Scenarios

VOC and CO.

PM2.5(ug/m³) Concentration level

Information Parameters

- Voltage frequency: 50/60Hz
- \bullet Ambient temperature for transportation and storage: -20°C ~+55°C
- Communication information: RS485 default baud rate is 38400, default add 1 Anti-electrical shock safety class: Class II(HAQ61X); Class III (HAQ41X/HAQ21X)
- Overvoltage class: Class II

Technical Parameter

		HAQ21L HAQ21BW	HAQ41L HAQ41BW	HAQ61L HAQ61BW HAQ61B HAQ61L-NL
PM2.5 μg/m³	0~999	*	*	*
Formaldehyde PPB	0~999			*
CO2 PPM	400-2000	*	*	*
VOC PPB	0~999			*
Temperature °C	-10~+55		*	*
Humidity %RH	0~95		*	*
Display		TFT sc	reen	
Communication mode	RS485			
Operating voltage	100V-240VAC 50/60HZ (HAQ61L/HAQ61BW/HAQ61B /HAQ61L-NL 24VDC+/-20% 50/60HZ (HAQ21L/HAQ21BW /HAQ41L /HAQ41BW			
Operating temperature	-10°C~+55°C			
Operating humidity	≤95% (non-condensing)			
Structure size	86mm×86mm×59mm (Length×width×height)			

Remarks: Carbon dioxide display value will be stable after contiously power up for 48 hours. Isolated power (SELV) must be used to supply 24V equipment

Equipment pressure parameter

Note: in order to ensure the normal operation of the equipment and reduce the chip load, please follow the following specifications.

		0 1		
Baud rate	Read supportable frequency	Write supportable frequency		
4800	≥400ms	≥1000ms		
9600	≥400ms	≥1000ms		
19200	≥400ms	≥1000ms		
38400	≥400ms	≥1000ms		

Installation Part

Please check whether the product is in good condition and the accessories are complete after unpacking.

(1) Installation notes:

To ensure correct installation, please be sure to read the "Installation

The contents mentioned herein are warnings and all are important contents related to safety, so please be sure to follow them.

- This product must be installed by professionals.
- Do not disassemble or assemble at will.
- Use specified cables for wiring, and do not apply external force to the connector terminals.
- Communication cables cannot be co-piped or co-slotted with strong electrical power.
- RS485 communication cable is recommended to be shielded. twisted pair cable.

(2) Product Dimensional Drawing (Unit: mm)







according to the instructions on the back cover of the device to ensure reliable wiring,24V supply requires separate co-located with strong wires.(Power off



inside the electrician's cassette and make sure that the back cover of the device is on cover of the device to the 8-core socket device, and then buckle the front shell

Note: Please disconnect the air switch before wiring. It is recommended that the specification protective current of the air switch should be>4A.

Notes and Common Troubleshooting

Fault	Possible cause	Troubleshooting method		
Startup failure	The device is not powered on	Check whether the power is cut off, and re-power on the device after connecting the power cord		
485 communication abnormality	1)485 line is not connected correctly 2)The baud rate and address are not correct	Check the 485 line connection Set the correct baud rate and address		
Large error of measurement value	1)The startup preheating is not completed 2)The air inlet and outlet are blocked	1)Wait for 5 minutes after turning on the device, and then read the value; 2)Check whether the air inlet and outlet are blocked, and read the value after removing foreign objects.		

 Do not disassemble the shell and internal devices of this product by yourself. When the product is damaged, it must be inspected and repaired by the aftersales service personnel authorized by the company;

- PM2.5 particulate matters and formal dehyde in the air are not evenly distributed, so it is normal for the measured values at different measuring points in the same room to have deviations, and the overall value can reflect the air quality in the room:
- Rising temperature will promote the emission of formaldehyde, and the
- formaldehyde value may be higher in hot summer or during heating in winter; • Two products cannot be placed close to each other, which will block the vents and cause inaccurate measurement.
- This product is a non-metering device.
- Carbon dioxide display value will be stable after contiously power up for 48
- This product needs to be preheated for about 5 minutes after startup each
- Do not use it in an environment of high temperature, high humidity and heavy oil fume for a long time;
- Do not use it for a long time in a place where the PM2.5 concentration is >300 micrograms per cubic metre; otherwise, it will easily cause internal clogging
- of the device, resulting in damage to the sensor.; Do not use it in highly corrosive environment (e.g., H₂S, SO,, Cl₂, Hcl); • Do not subject the product to strong shocks and vibrations, so as not to damage the product and its accessories and cause product fault;
- When cleaning, please disconnect the power supply and wipe the surface of the shell gently with a soft cloth. Do not clean it with organic solvents;

product-security

To ensure the physical safety of the device, only authorized personnel can access the equipment and the bus.

Ensure the safety of device installation, deployment, operation, maintenance management.

Ensure that the device is in an isolated internal network. If there is a safety risk, please contact https://www.honywell.com/en-us/

Names and Content of Hazardous Substances in the Product

Parts	Hazardous Substances					
Name	Pb	Hg	Cd	Cr6+	PBB	PBDE
PCB	×	0	0	0	0	0
Silkscreen	0	0	0	0	0	0
Housing	0	0	0	0	0	0

The table is created by SJ/T11364 requirement.

o: Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in China's GB/T26572. x: Indicates that this hazardous substance contained in at least one of the homogene-ous materials for this part is above the limit requirement in China's (€ RoHS

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