HONEYWELL

Transmission Risk Air Monitor

A cost-effective monitor for use in schools, restaurants, and other small-to-medium-sized buildings that alerts users when conditions are present that may increase the risk of exposure to airborne viral transmission.*

Classrooms, restaurants, and buildings with outdated HVAC and ventilation systems can foster environments where the risk of airborne virus transmission could increase.* Honeywell proprietary technology that monitors CO_2 levels, coupled with user-controlled settings to account for human activity levels in an indoor area, provides users with a portable, cost- effective, and user-friendly solution that alerts when conditions are present that may increase the risk of exposure to airborne viral transmission.

Research conducted by scientists at the University of Colorado 1 has shown that real-time monitoring of indoor ambient air can be an indicator of increased risk of airborne viral transmission, utilizing different levels of risk-based factors such as ${\rm CO}_2$ concentration levels and the type of human activity in the area.*

Using this guidance and Honeywell algorithms, we identified air quality conditions that are driven by common activities and variables such as average room size, number of people present, breathing rate, and duration. The device comes with three pre-programmed indoor activity settings: low activity (movie theaters, libraries, and classrooms), medium activity (restaurants, offices, small clinics), and high activity (gyms, indoor arenas, recreation centers) and is recommended for coverage of 800-1000 square feet. For each setting, the monitor provides indications using a traffic light pattern (green, yellow, or red) and a sound alarm so users can be aware of conditions that may increase the risk of airborne transmission based on detectable CO_2 levels.



The Honeywell Transmission Risk Air Monitor helps you monitor indoor environments in real time for potential increase of exposure to airborne transmission risk.



Monitor exposure for students in classrooms to indicate transmission risk level.



Monitor airborne transmission risk levels in restaurants to alert of higher risk situations.

FEATURES AND BENEFITS



The monitor comes with a user manual and USB charging cable. AC adapter sold separately.



Made of alloy and plastic, the monitor's sleek, lightweight design makes it easy to carry for real-time monitoring anywhere.



Red, yellow, and green indicators show at-a-glance the potential airborne transmission risk level of the air you are breathing.



Honeywell Transmission Risk Air Monitor Technical Specifications

SPECIFICATIONS		
CHARACTERISTIC	PARAMETER	
Dimensions ($H \times W \times D$)	80 mm × 80 mm × 22 mm [3.1 in × 3.1 in × 0.87 in]	
Weight	150 g	
Housing materials	Aluminum alloy	
Display	TFT	
Input voltage	5 V	
Input current	1 A	
Battery	Lithium-ion rechargeable battery 10-hour battery time	
Battery capacity	2,600 mAh	
Operating temperature & humidity	0°C to 50°C, 0% RH to 90% RH	
USB port	Micro USB	

SENSOR RANGE		
DESCRIPTION	DETECTION RANGE	
CO ₂ (NDIR)	400 ppm to 2000 ppm	
Temperature	-20°C to 60°C or -4°F to 140°F	
Humidity	0% RH to 100% RH	

DEVICE INDICATION







	GREEN	YELLOW	RED
Conditions	Likely low airborne transmission risk	Likely medium airborne transmission risk	Likely high airborne transmission risk
Recommended Action	-	Open windowsTurn on HVAC fan	 Ventilate room immediately Reduce activities Move out of room until light changes to green
Alarm	-	One beep	Two beeps

In California's 2020 School Reopening Ventilation and Energy Efficiency Verification and Repair Program legislation, the importance of CO₂ monitoring in classroom settings is highlighted,

"To ensure proper ventilation is maintained throughout the school year, all classrooms shall be equipped with a carbon dioxide monitor.²"

Monitors should be placed in the center of activity areas and should be close to breathing height (approximately $1.5 \, \mathrm{m}$, depending on the height or age of the room occupants), out of direct sunlight, and not directly located near induction units, floor fans, or heaters.

*The Honeywell Transmission Risk Air Monitor (HTRAM) analyzes specific air quality conditions and alerts the user when conditions are present that may increase the risk of exposure to airborne viral transmission. It does not prevent or reduce virus transmission nor mitigate viruses that may be present, nor does it detect or warn against the presence of any virus, including but not limited to COVID-19. The HTRAM does not repel or destroy any microorganism, viruses, bacteria, or germs.

- It is buyer's sole responsibility (1) to determine the suitability
 of the HTRAM for use in its application, (2) to operate the
 HTRAM in accordance with the user manual and any other
 instructions provided by Honeywell, (3) to determine, based
 on buyer's experience, expertise, and other available tools,
 the suitability of any product or service it may offer or
 recommend to the end user.
- Buyer is responsible for determining whether the product is appropriate for use under certain statutory guidelines and are likewise responsible for determining whether the HTRAM is subject to any government reimbursement programs.
- Any recommendations or assistance provided by Honeywell regarding the use or operation of the HTRAM – through our literature, the Honeywell web site, or otherwise – shall not be construed as representations or warranties of any kind, express or implied, and such information is accepted at buyer's own risk and without any obligation or liability to Honeywell.
- The information we supply in this data sheet is believed to be accurate and reliable as of this writing. However, specifications may change without notice, and Honeywell assumes no responsibility for its use.
- Honeywell disclaims all implied warranties, including those
 of merchantability and fitness for a particular purpose.
 In no event shall Honeywell be liable for consequential,
 special, incidental, or indirect damages, or lost profits or lost
 revenues.





¹ https://tinyurl.com/FAQ-aerosols

² https://leginfo.legislature.ca.gov/faces/codes_displayText. xhtml?lawCode=PUC&division=1.&title=&part=1.&chapter=8 7 &article=3