

# Product Analysis & Critique

Levoit Core 300 Air Purifier

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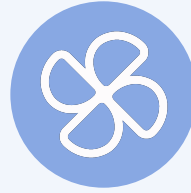
[1]

# Product Overview

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The Levoit Core 300 is a compact air purifier ideal for small to medium-sized rooms.

Its patented VortexAir Technology spreads fresh air to every corner of your room, while its effective 3-stage filtration system captures particles such as fine dust, smoke particles, pollen, and pet dander.<sup>[1]</sup>



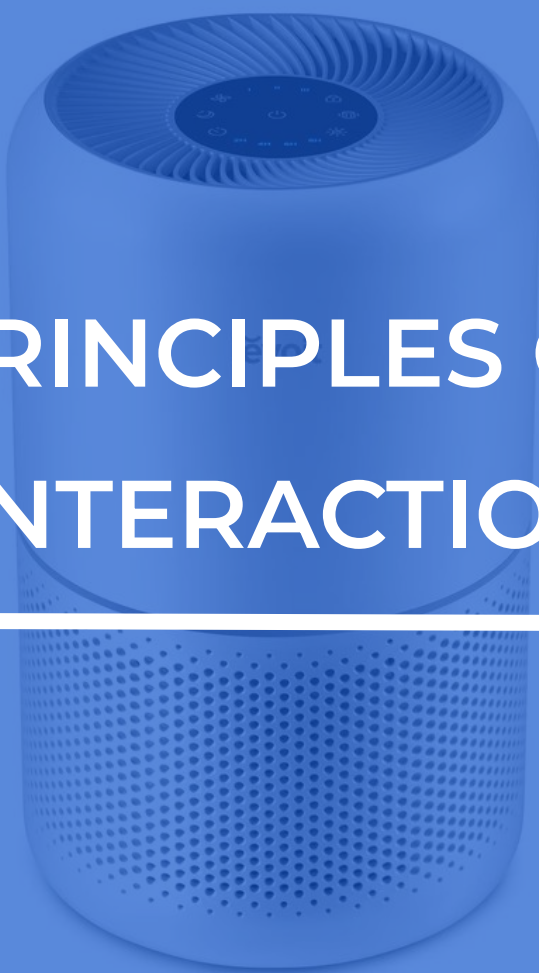
**Multiple Fan Speeds**



**Set a Timer**



**Sleep / Quiet Mode**



# PRINCIPLES OF INTERACTION

# AFFORDANCE



Cylindrical shape with flat bottom suggests that the purifier can be placed on various locations.



Large vents on the top suggests 360° air intake.



Visible outlet grid at the bottom half indicates air output.



Top-mounted control panel affords easy access and interaction between user and device.



The physical form effectively communicates its intended use without requiring specialized knowledge. Cultural norms of electronic devices with buttons reinforce how it should be interacted with. The device could benefit from more obvious visual cues (removable stickers) about airflow direction to help users position it effectively.

# SIGNIFIERS



Touch-sensitive buttons on the control panel displayed with icons.



Power button prominently placed in the center.



Bottom of device contains "Open" and "Close" labels to indicate turn directions for filter replacement.

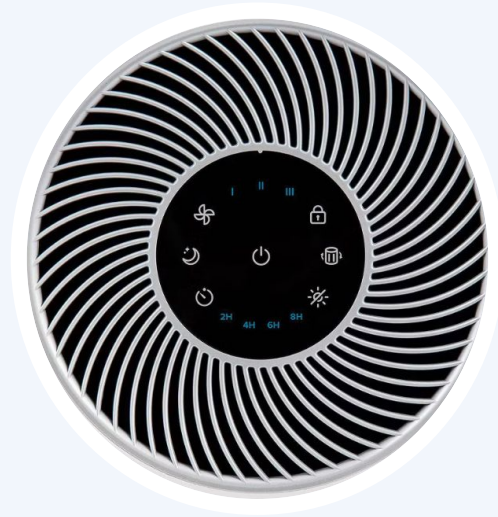


The use of icons rather than text makes the interface accessible across language barriers. By placing the main call to action at the center of the device, users can easily achieve its goal to have clean air whenever they desired. The clear labeling for filter replacement on the bottom of the device provides explicit instructions, reducing the need for users to consult a manual.



The reliance on touch-sensitive buttons may present challenges for users with visual or motor impairments. This design choice makes assumptions about the physical capabilities of the user base.

- ↗ Fan speed and Timer buttons arranged in increasing order from left to right.
- ⚙ Use of icons to represent familiar actions, allowing users to quickly understand the results of each action.
- 💡 The light indicators also map well to different functions: white/blue for regular settings, red for issues like filter replacement.



The left-to-right increasing order effectively communicates the relationship between button position and intensity/duration, making it easy for users to select their desired settings.

The use of familiar icons demonstrates consideration for users from diverse linguistic backgrounds, enhancing the device's accessibility and global appeal. The intuitive relationship between controls and functions suggests a well-thought-out design that considers the user's perspective and expectations.

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- ➡ The unique filter design with one-way insertion prevents user error.
- 🔌 The cord length limits placement of the device within a section with the room.
- 🔒 The display lock feature adds a layer of protection against unintended operation.
- 🕒 Preset timer increments simplify the interface but also limit customization.

## CONSTRAINTS

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The force functioning design on filter installation design succeeds in preventing a common user error and reducing frustrations. The display lock (lock out) feature demonstrates consideration for real-world use scenarios, including households with children.



The cord length constraint may unintentionally limit the device's utility in certain spaces. The limited timer options reflect assumptions about user needs that may not hold true for all customers. While it simplifies the interface, it also reduces flexibility.



Visual feedback through LED indicators (blue light) for selected action / mode



Red light indicator for filter change, but does not reset automatically after filter replacement.



Noticeable change in fan noise when speed is adjusted to higher setting, similar in Sleep Mode.




## FEEDBACK



The immediate feedback on button presses confirms user actions, reducing uncertainty. The change in fan noise provides continuous, passive feedback on the device's operation level, though this could be seen as a drawback for noise-sensitive users.

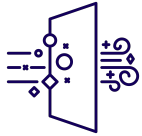


The visual-only feedback system may present accessibility challenges for users with visual impairments, potentially excluding a portion of the user base. The reliance on LED indicators for maintenance assumes users will regularly check in with the device, which may not be true for all users. While the change in fan noise effectively communicates the current operational level, it doesn't provide information about air quality improvements or filter status. The lack of automatic reset misses an opportunity to confirm to the user that the filter replacement was successful.



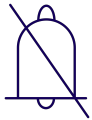
# Emotional Design

## SOLVES



Poor air quality problem by reduce allergens, dust, and pollutants in indoor living spaces

With



Quiet operations without being disruptive.

## AESTHETICALLY PLEASING



Minimalist design with sleek aesthetic



Compact size doesn't dominate room space and easily move around



Neutral color options (white or black with grey vents) suit various interior designs

# PERSONAL MEANING

As a person with asthma, it's my shield against airborne irritants, allowing me to breathe easier and live more comfortably in my own space.

For my scent-sensitive cats, it creates a stress-free haven by neutralizing odors, ensuring their environment is always fresh and calming.

It symbolizes a commitment to a clean, healthy household, where both human and feline residents thrive in an atmosphere of high-quality air, reducing the risk of illness and promoting overall wellness.



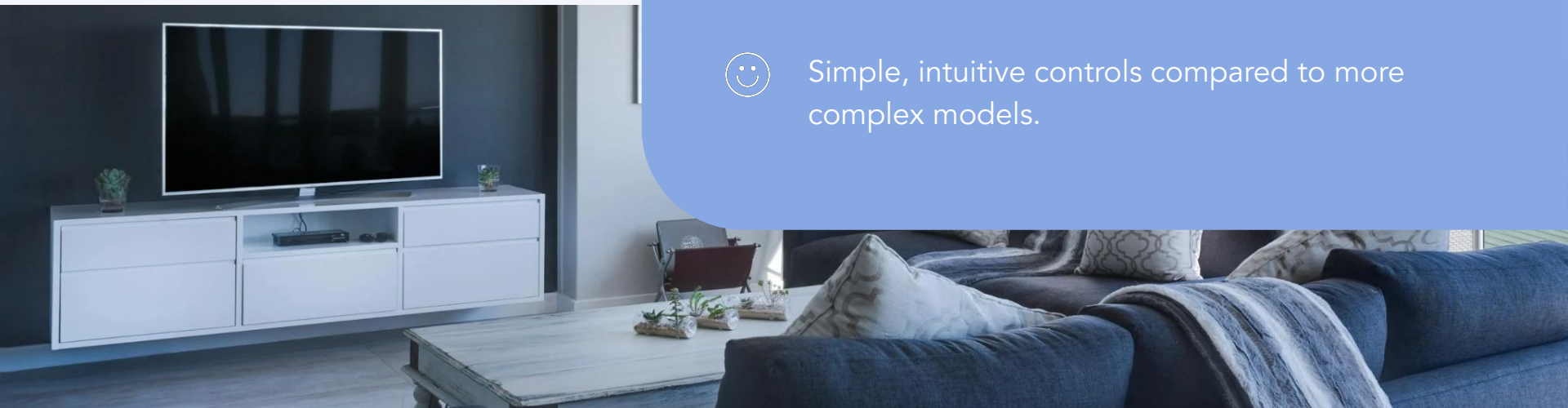


# LARGER AUDIENCE

To a broader audience, particularly those with allergies, asthma or respiratory conditions, pet owners, and smell conscious individuals, the Levoit Core 300 means relief and improved quality of life.

The Levoit Core 300 represents peace of mind and health consciousness. It's a proactive step towards improving indoor air quality and overall well-being.

# IMPROVEMENT OVER SIMILAR PRODUCTS



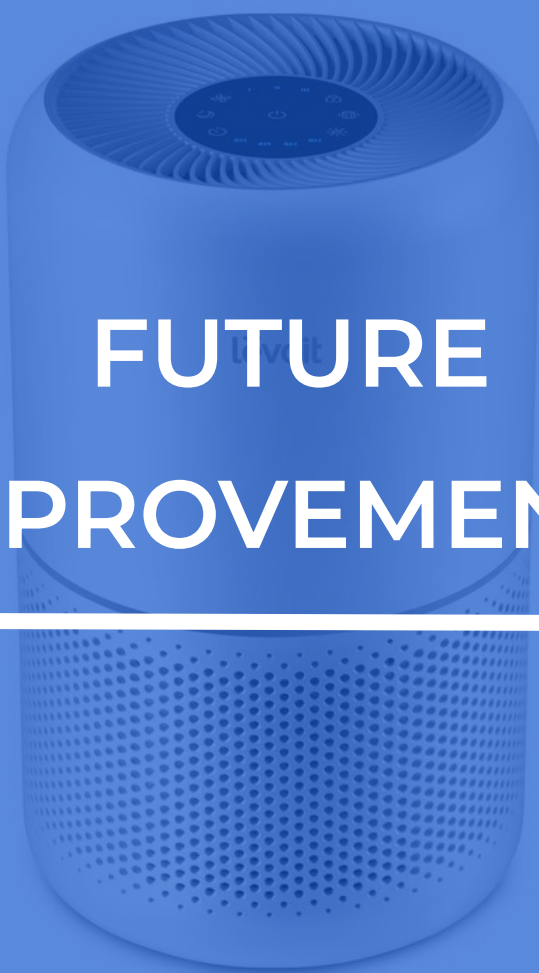
Balance between performance, quietness, and size.



It offers features like multiple fan speeds with larger area of coverage all within a sleek, compact device compare to similar med-size products.



Simple, intuitive controls compared to more complex models.



# FUTURE IMPROVEMENTS

## BASED ON THE PRINCIPLES OF INTERACTION

### Feedback

- Clearer digital display showing real-time air quality metrics, rather than just colored lights
- Incorporate audio notification for filter replacement for users who might not regularly check the device itself.
- Explore the possibility of a more intuitive filter reset process, such as automatic reset after new filter has been inserted.

### Constraint

- Explore the possibility of more granular timer settings or a custom timer option for users who desire more control.



For tech-savvy and health conscious users: Develop a companion app so users could control the device remotely and have the ability for detailed air quality tracking.



For visually impaired: Include tactile differentiation on buttons, heaptic, and/or audio feedback to assist interaction, especially on filter reset/replacement process.

## APPEALS TO DIFFERENT AUDIENCES

1. <https://levoit.com/collections/levoit-core-series-air-purifiers/products/core300-air-purifier>
2. All photos are powered by [Pexels](#)

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## REFERENCES

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