

1st February

Xiaomi Air Purifiers - Gen 1 and Gen 2 comparisons



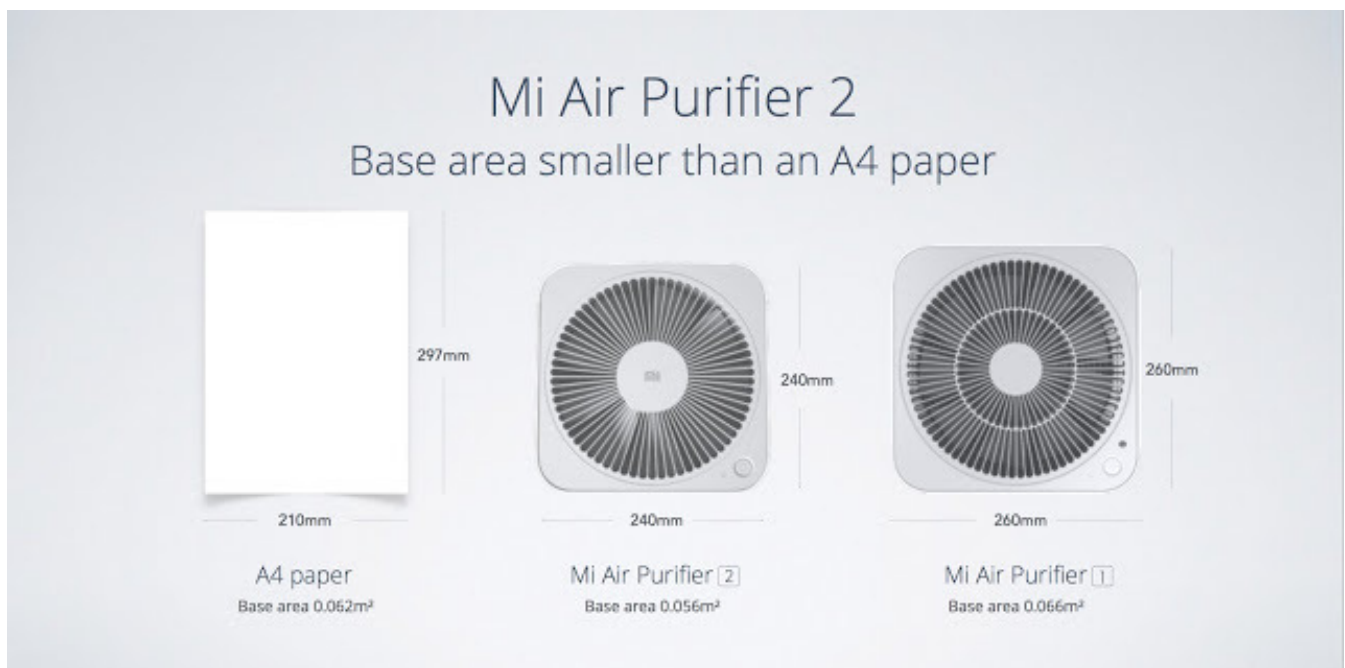
[\[https://1.bp.blogspot.com/-It-YVnevkyM/Vt448eUIFDI/AAAAAAAAAC1w/umle1oEHkII/s1600/Mi-AP-Gen-1-n2-Comparison-00.png\]](https://1.bp.blogspot.com/-It-YVnevkyM/Vt448eUIFDI/AAAAAAAAAC1w/umle1oEHkII/s1600/Mi-AP-Gen-1-n2-Comparison-00.png)

Mi air purifier 2 is launched on November 24, 2015, it can be considered as the upgrade generation of the earlier Generation 1. Compared to the Gen 1 model, the biggest change was undoubtedly in its volume on a smaller foot-print, but also less space occupied. Mi air purifier Gen 2 is targeted mainly for small apartment users which can provide for purification area of 23-48 m².



[https://2.bp.blogspot.com/-lvWehy4q4kw/Vt42W-CWfSI/AAAAAAAC1c/_f3liChr2AM/s1600/Mi-AP-Gen-1-n2-Comparison-01.jpg]

Xiaomi has made the Air Purifier 2 lighter as well as smaller. As compared to the 735x260 mm laterally size Air Purifier 1, the Air Purifier 2 measures simply 520x240 mm.



[<https://1.bp.blogspot.com/-PYPqWfnty3U/Vt42W104mcl/AAAAAAAC1g/Mw-W2F4NoME/s1600/Mi-AP-Gen-1-n2-Comparison-04.jpg>]

The foot print area is also 15% smaller.



[https://1.bp.blogspot.com/-GNHwBkxxiTA/Vt4rasRAUtl/AAAAAAAAC0c/DF_39UHK1xM/s1600/Mi-AP-Gen-1-n2-Comparison-02.jpg]

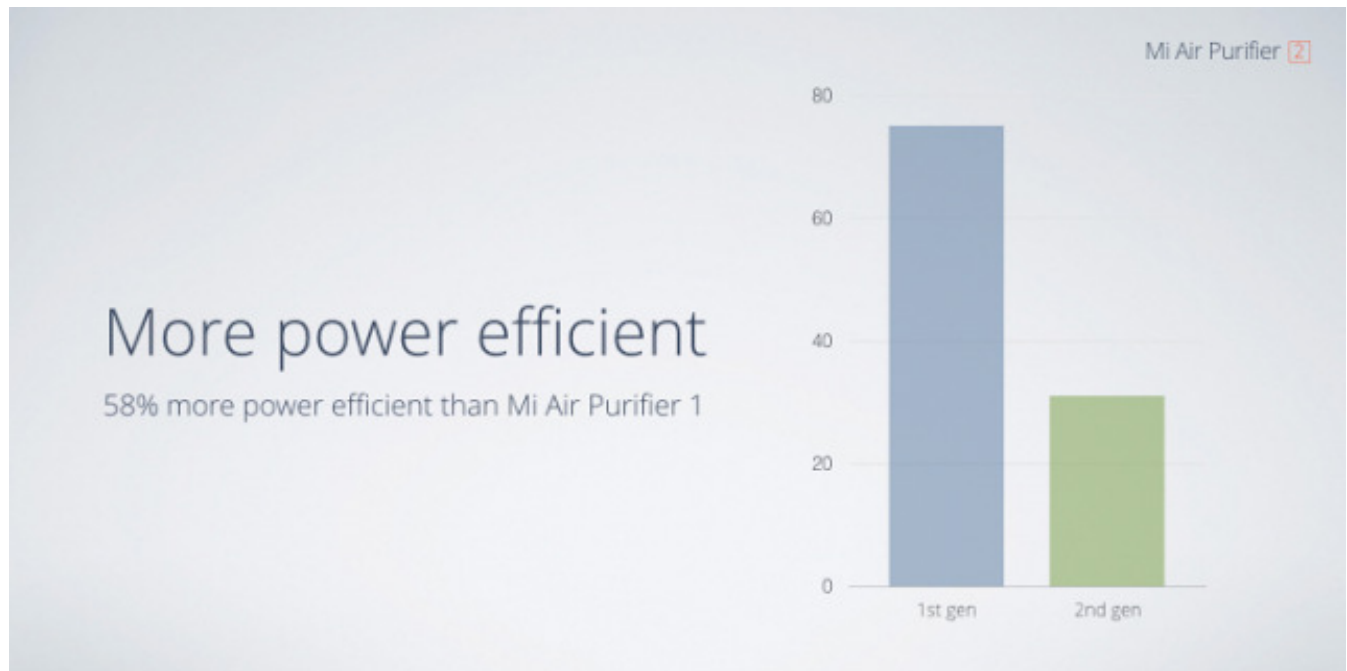
It houses a solitary electric motor, twin booster fans (which detoxifies at an effective variety of up to 39.6m²), The design of the Mi Air Purifier 2 was inspired by aircraft engines and comes with an anti-formaldehyde enhanced filter that's replaceable. It also filters 99.99% of PM 2.5 particles and up to 92% of formaldehyde (a colorless, flammable, strong-smelling chemical that is used in building materials and to produce many household products).



[<https://1.bp.blogspot.com/-CjNQhkcmU6M/Vt4rbha6VBI/AAAAAAAAC0s/ZP8WwXC8Js0/s1600/Mi-AP-Gen-1-n2-Comparison-06.jpg>]

Xiaomi says the more compact design is made possible by a new single-motor, dual-fan design, which has enabled it to shrink its dimensions by up to 40 percent over its predecessor. However, its smaller size means that Air Purifier 2 has had to take a slight performance hit compared to the predecessor's dual-motor design. Its Clean Air Delivery Rate (CADR), or the amount of air it cleans per minute, is now 330m³/h in standard mode, compared to the 406m³/h for the larger model.

Still, this can go up to 388m³/h in Turbo mode and Xiaomi says it can filter the air in a 23m² room in only 10 minutes.



[<https://1.bp.blogspot.com/--SZgSCNxIpc/Vt4rdF8kfml/AAAAAAAAAC1Q/q4ZJJnQcMB4/s1600/Mi-AP-Gen-1-n2-Comparison-09.jpg>]

In addition to the smaller foot-print compared to Gen-1, some optimization was also done to the motor, dual-fan blower motor design in Gen-1 is now reduced to single fan motor in Gen-2, this also allowed energy saving of 58% compared to Gen-2.



[https://1.bp.blogspot.com/-LkuUNpjp8Q/VuAld1mjnBI/AAAAAAAAAC20/oAcuGvhL_w4/s1600/Mi-AP-Gen-1-n2-Comparison-03a.jpg]

The above chart shows the different recommended room areas for different CADR value, so that air can be purified efficiently by the air purifier.



[https://1.bp.blogspot.com/-OnGy3sj1nEU/Vt4rd8aPRHI/AAAAAAAAAC1Q/6_33BIe98BI/s1600/Mi-AP-Gen-1-n2-Comparison-12.jpg]

Although smaller in size, and the motor going through some optimization and changes, but its purifying effect does not seem to lowered, the one-hour PM2.5 purification can reach 97.7%.



[https://4.bp.blogspot.com/-aKMmXsvI_gE/Vt4rcQou_FI/AAAAAAAAAC0w/EOdAsbCowbg/s1600/Mi-AP-Gen-1-n2-Comparison-07.jpg]

In the purification capacity, CADR is now 330 m³ per hour for standard mode, and in the turbo mode CADR is 388 m³ per hour, clean up area from 27.2 - 46.6 m² (292 - 500 ft²), it takes 10 minutes to complete a purification process once for a 23 m² (250 ft²) room. The firm additionally urges that the Air Purifier 2 is substantially more power efficient – 58 percent even more power efficient.

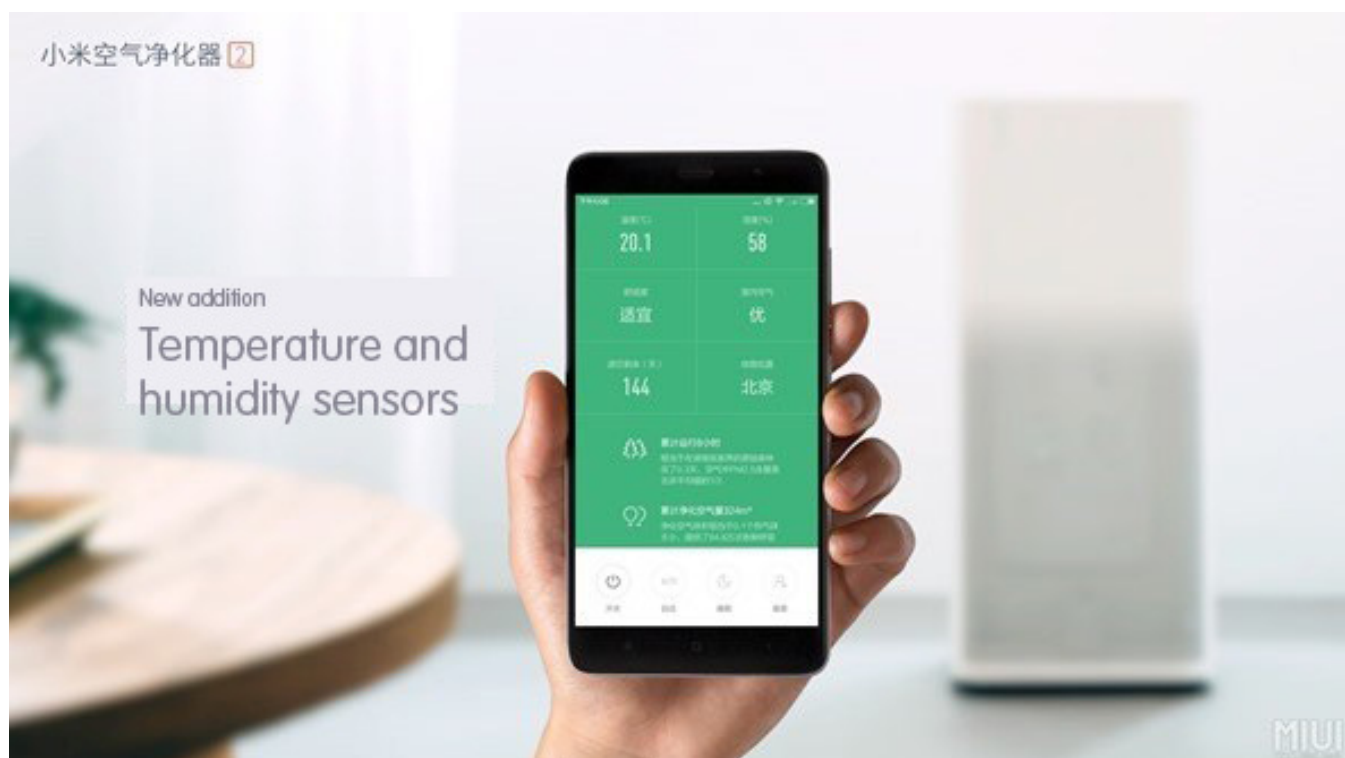


[<https://3.bp.blogspot.com/-eFlmRs64Zgc/Vt4rcnEWUnI/AAAAAAAAAC00/cK9Y19MWCvw/s1600/Mi-AP-Gen-1-n2-Comparison-08.jpg>]

The company states that the newly improved device is now 11 percent quieter than in the first generation AP, and also makes merely 30db of noise when switched over to sleep mode.

The indicator LED is placed at 7.5cm from the ground, just low enough to avoid the light interference when reading on the sofa or resting in bed. The light sensor can be adjusted according to the indoor light LED brightness, the indicator can also be completely off.

Mi air purifier 2 is an intelligent air purifier with a WiFi connection to the phone, you can use Mi Smart Home App for live view of indoor air quality changes at home and will base on bedroom area to adjust according to the most appropriate mode of operation. It is smart enough to learn the user's habits, such as automatically adjusted to sleep mode before you go to sleep, and to automatically shut down when they go out.



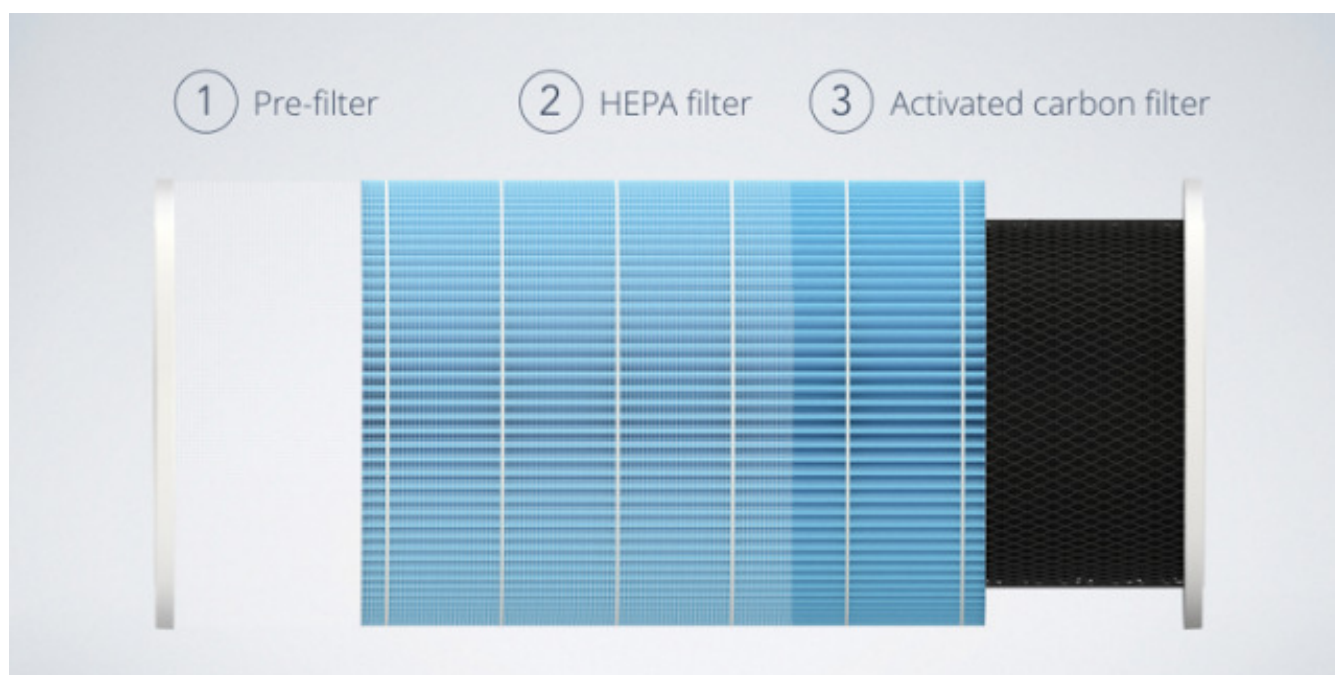
[<https://4.bp.blogspot.com/-LdjUfcSQDQM/VuAmmFG-xzI/AAAAAAAAAC3A/VYZhBpnf5So/s1600/Mi-AP-Gen-1-n2-Comparison-10a.jpg>]

New Addition - Control of new smart phone temperature, humidity sensor

Mi Air Purifier 2 had added the high quality Japan SHINYEI sensor, which provide real-time detection of indoor air PM2.5 content. The Air Purifier will change according to the data for air quality, and automatically switches to the optimum decontamination mode. In addition, AP2 also adds temperature, humidity sensors, which will provide mobile phone view on indoor air quality, temperature and humidity changes at a glance, helping you to always grasp the comfort of the indoor environment.



[<https://3.bp.blogspot.com/-U3sjMFTkZf0/Vt4rd1OPriI/AAAAAAAAAC1A/NEQyvtQhqaw/s1600/Mi-AP-Gen-1-n2-Comparison-11.jpg>]



[https://3.bp.blogspot.com/-7-Km7ofb3qo/Vt4reUa7OyI/AAAAAAAAAC1I/_xoRUVshFsQ/s1600/Mi-AP-Gen-1-n2-Comparison-13.jpg]

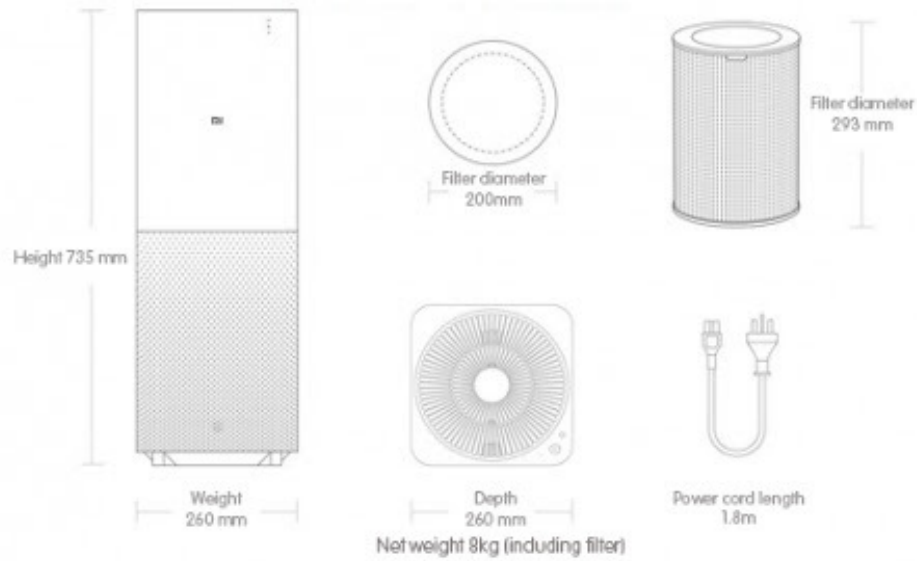
Coming to the mechanism, the Air Purifier 2 packs a quality Tri-filters: Pre-filter, HEPA filter and an Activated Carbon filter that comes with a filtering capability of whooping 99.7% of PM 2.5



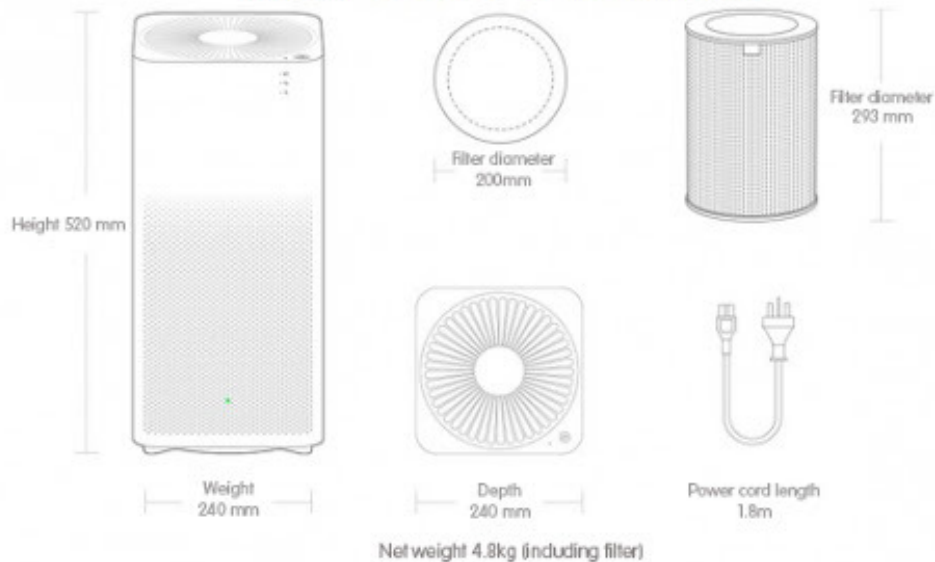
[<https://3.bp.blogspot.com/-l0NvCIBQk5E/Vt4re6xz4kI/AAAAAAAAAC1M/V5Rq7Wm5Wmo/s1600/Mi-AP-Gen-1-n2-Comparison-14.png>]

Comparing the official specifications

Mi Air Purifier Generation 1



Mi Air Purifier Generation 2



[<https://2.bp.blogspot.com/-r-dfJbmNwGo/VuAkKR7KBcl/AAAAAAAAAC2U/6GsfI-uy5U8/s1600/Mi-AP-Gen-1-n2-Comparison-A21.jpg>]

Dimensions : First Generation is taller, second generation is smaller in size, the filter is common use for both generations.

Mi Air Purifier Generation 1

406 m³/h

CADR Value (purification efficiency)

Purifying 406 m³ of air per hour

28.4 m² ~ 48.7 m²

Recommended deployment area

Clean air once every 12 minutes

Mi Air Purifier Generation 2

330 m³/h

CADR Value (purification efficiency)

23 m² ~ 39 m²

Recommended deployment area

Cavarii Online Store

[https://4.bp.blogspot.com/-cxdOhK21_ps/VuAkKTGgFpI/AAAAAAAAAC2Q/qWGmnhs0t4o/s1600/Mi-AP-Gen-1-n2-Comparison-A22.jpg]

Purification efficiency: First generation has better purification performance than 2nd generation, and with larger decontamination area as well.

Mi Air Purifier Generation 1



Wifi Module
802.11 b/g/n
Support smart connection,
mobile remote control



Air quality sensor
Sharp high sensitivity
digital particle sensor

Mi Air Purifier Generation 2



Wifi Module
802.11 b/g/n
Support smart connection,
mobile remote control



Air quality sensor
Japan SHINYEI sensor



**Temperature and
humidity sensor**
Swedish Sensirion
sensor

Cavarii Online Store

[https://4.bp.blogspot.com/-Es1JVqn8le4/VuAkKUi6FuI/AAAAAAAAAC2Y/U7HjR7KGu_A/s1600/Mi-AP-Gen-1-n2-Comparison-A23.jpg]

Smart Module: Both generation 1 & 2 have WiFi module and air quality sensors, 2nd generation has added multi temperature and humidity sensors.

Mi Air Purifier Generation 1



Power
lowest / highest



Support global wide voltage
AC 100 v - 220v 50/60 Hz

Mi Air Purifier Generation 2



Power
lowest / highest



Support global wide voltage
AC 100 v - 220v 50/60 Hz

Cavarii Online Store

[<https://3.bp.blogspot.com/-LppfH0VJKOQ/VuAkLATysZI/AAAAAAAAAC2c/1toIB6cNnKk/s1600/Mi-AP-Gen-1-n2-Comparison-A24.jpg>]

Power: First generation has maximum power consumption of 75W, 2nd generation has maximum power consumption of 31W.

Mi Air Purifier Generation 1

Package Contents

Package size - 798mm x 310.5mm x 313mm



Mi Air Purifier Generation 2

Package Contents

Package size - 580mm x 290mm x 289mm









Cavarii Online Store

[https://3.bp.blogspot.com/-vJJrITd1l0Y/VuAkLUBWg_I/AAAAAAAAAC2g/8HAXrWNEzT0/s1600/Mi-AP-Gen-1-n2-Comparison-A25.jpg]

Package Contents: Both generations has the same content, while the packaging size of 1st generation is much bigger, due to the taller size of the Air Purifier itself.







Mi Air Purifier Generation 1

Purifier functions

 AUTO Auto mode	 Light sensor	 Air Quality Indicator
 Sleep mode	 Switch/mode switch	 Particulate matter sensor
 Turbo mode	 WiFi indicator	

Mi Air Purifier Generation 2

Purifier functions

 AUTO Auto mode	 Switch/mode switch	 Air Quality Indicator
 Sleep mode	 WiFi indicator	 Particulate matter sensor
 Favourite mode		

Cavarii Online Store

[https://3.bp.blogspot.com/-QxBgbohbm_w/VuAkLXn9OJI/AAAAAAAAAC2k/6qv6h6kKaH4/s1600/Mi-AP-Gen-1-n2-Comparison-A26.jpg]

Purifier functions: Both generations have automatic mode, sleep mode, the switching mode switching, WiFi indicator, air quality indicator, particulate matter sensor, the difference is first generation has light sensor and Turbo mode, and the second generation has the Favorite mode.

Mi Air Purifier Generation 1

Smart phone remote control

Mi Smart Home App , It supports both Android and IOS



Auto/Sleep/Turbo



Speed regulation



Timer purification



Air quality testing



Filter replacement alert

Mi Air Purifier Generation 2

Smart phone remote control

Mi Smart Home App , It supports both Android and IOS



Auto/Sleep/
Favourite



Speed
Regulation



Timer
Purification



Air Quality
Testing



Filter
Replacement
Alert



Temperature
Humidity
Sensors



Comfort
Assessment

Cavarii Online Store

[<https://4.bp.blogspot.com/-7Uf2hOaoZWs/VuAkLy-2dtI/AAAAAAAAAC2o/RIumVSrQupc/s1600/Mi-AP-Gen-1-n2-Comparison-A27.jpg>]

Smart phone remote control functions: Both generations can be accessed through Smart phones for remote control functions, the second generation has a new temperature and humidity testing and comfort assessment functions.



[https://2.bp.blogspot.com/-vHEY_SQO86w/Vt2HE5EDnRI/AAAAAAAAACzo/Uk5-BYectCM/s1600/air%2Bpurifier-1-n-2.jpg]



[<https://4.bp.blogspot.com/-Pk9sZ0o4Fvs/Vt2HE5fRB1I/AAAAAAAAACzs/fH796DUCeAk/s1600/AP2.jpg>]

When we talk about air purifiers
What we're talking about?

CADR

CADR is the core technology indicators for Air purifiers

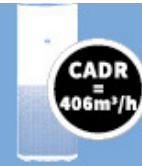
CADR (Clean Air Delivery Rate) is purification capacity for targeted pollutants (particulate and gaseous pollutants)



The national standards
clearly defined



Testing authority



The higher the CADR value
the stronger the ability to purify air

Largest Applicable Area

The largest application area = $0.12 \times \text{CADR value}$

Applicable area is an area where the air purifiers can fully maximize the effectiveness of the purification area, anything exceeding the applicable area of use the purifier will not effectively purify the air.



The national standards
clearly defined

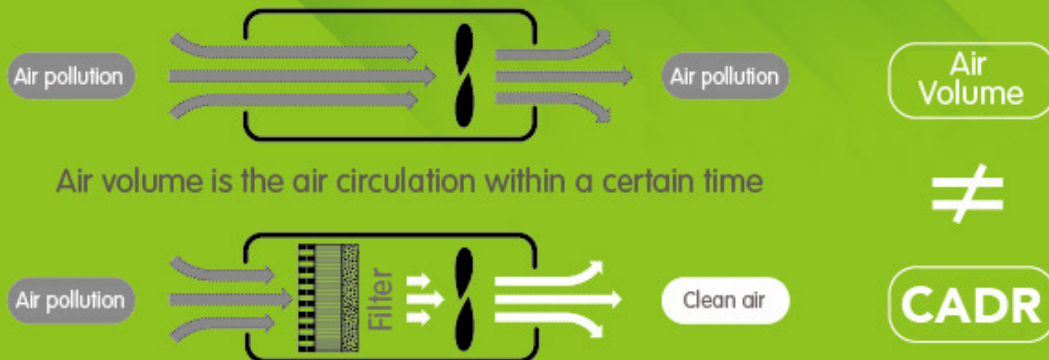


Testing authority



CADR is the only parameter to
determine the value of an applicable area

Air volume is a false notion



[<https://4.bp.blogspot.com/-Yl1HmKJFb6g/Vtr6MaDtVHI/AAAAAAAAACw0/dzvycVYL1wo/s1600/CADR-Definition-01.jpg>]



[<https://4.bp.blogspot.com/-Dh5GXcNu5Q0/Vt6TFLzh9TI/AAAAAAAAAC18/3VaUgyC7Pac/s1600/Mi-AP-Gen-1-n2-Comparison-15.jpg>]

Posted 1st February by [Cavarii Online Store](#)

Labels: [Air Purifier](#), [Air Purifier 2](#), [Filters](#), [HEPA](#), [Mi Smart Home App](#)



Add a comment