**The Best White Case Fans in 2021**

Fans are often an afterthought of the build process but are crucial to the longevity of your computer. Coming up, we’ll be reviewing some of the best white 120mm,140mm, and 200mm case fans available and cover the pros and cons of each. Whether you’re building your first PC, replacing a noisy fan, or changing up the color scheme of your rig, you want everything to look clean and professional. I aim to help you make an informed decision and ensure your set-up is exactly how you want it.

# **120mm**

## **1. Cooler Master SickleFlow 120 V2 ARGB White Edition**

The Cooler Master SickleFlow 120 V2 ARGB White Edition (called the SickleFlow 120 V2 henceforth) is the best on this list when it comes to airflow performance. In turn, it is the second loudest at its max speed. It has six ARGB LEDs inside the hub of the fan blades and comes in black and white, as a single fan or in a three-pack bundle.

### **In the box**

The single fan package, mainly for people looking to replace one fan, only comes with the fan, mounting screws, a connector clip, and a 4-pin PWM connector. The fans are powered by a 4-pin PWM cable and have two 3-pin ARGB connections; one is male, and the other is female, making them easy to daisy-chain together. If you get the three-pack bundle, it comes with everything you’ll need for a quick and easy installation. In addition to the single fan package, the bundle includes a 3-pin ARGB splitter extension and a Cooler Master mini RGB controller. The controller is pretty basic with a 5V ARGB header and is magnetic, so it’s easy to mount in your case. and has a push button to cycle through the six pre-programmed lighting effects. Additionally, the installation manual and other product information are supplied.

### **Quality and performance**

Thanks to its sealed rifled bearing sleeve and lightweight blades, these fans boast an impressive MTTF (Mean Time to Failure) of 160,000 continuous hours, which comes out to just over 18 years! The SickleFlow 120 V2’s exterior casing is constructed of a slightly off-white plastic in the style typical of most case fans and has rubber vibration damping pads at each mounting point. The seven sickle-shaped fan blades, which is where it got its name, are a frosted translucent color and designed to be extra wide with an increased curvature. Thus, providing a surprising 2.5mm H20 of static pressure and 62CFM of airflow, and that’s what landed this fan in first-place. Due to the airflow and static pressure they produce, these fans do a great job at both a case fan and a radiator fan. While these are not the most silent-running fans, they are still pretty quiet with a maximum of 27dB at full speed. With the PWM control of these fans, the SickleFlow 120 V2 can operate as low as 650RPM up to 1800RPM, giving you the ability to either run silent at low speeds or crank it up to high for maximum cooling.

### **Lighting**

The SickleFlow 120 V2s have six ARGB LEDs (Addressable Red Green Blue Light Emitting Diodes), which doesn’t sound like a lot. And it’s not. But the SickleFlow 120 V2s LEDs are very bright and well placed, giving the frosted fans a vibrant hue and guaranteed to give your rig that extra pop you’re looking for. On the packaging, Cooler Master says the SickleFlow 120 V2 fans are compatible with ASUS Aura, MSI Mystic Light, and ASRock Polychrome lighting software. Making the pre-programmed lighting controller just a last-ditch effort for people just wanting RGB and not interested in further customization. However, some users report that these fans are not compatible with some motherboards where these programs come standard. So make sure to double-check your motherboard for the correct internal headers before you make your purchase. Otherwise, you may need to buy an additional adapter.

### **Thoughts on price**

Coming in at less than $20USD per fan, if bought individually, the SickleFlow 120 V2s are a little pricey. If you go with the three-pack bundle, you’ll be getting your third fan at a slight discount, and the RGB controller is free. You don’t necessarily NEED the controller, but if you’re just starting out and want RBG fans, this is a good deal.

### **In Conclusion**

These are great Fans. Whether you have a water-cooled rig or want maximum airflow, the SickleFlow 120 V2s have got you covered. The three-pack bundle price is surely a great deal, especially if you want quality fans with a little custom lighting. The SickleFlow 120 V2s are not the most vibrant or customizable ARGB fans on this list but are the best in all-around performance. With the three-pack bundle still being sold, it’s one of the best deals right now for high-performance ARGB fans and well worth the price.

#### **PROS**

* Great airflow
* Impressive static pressure
* 160,000 hours MTTF
* PWM controlled
* Two-year warranty

#### **CONS**

* Limited ARGB
* Noisy

## **2. Cooler Master MasterFan MF120 Halo White Edition**

The Cooler Master MasterFan MF120 Halo White Edition (called MF120 Halo henceforth) is another spectacular series from Cooler Master. Coming in second with their performance, these fans are still very worthy of any rig. With a robust quality and price tag, the MF120 Halo fans are a great addition to any high-end PC. The MF120 Halos come in black and white and available as a single fan or three-pack bundle.

### **In the box**

As a single fan, you get the fan with two cables, one with a 4-pin PWM and a 3-pin ARGB with both male and female connections to chain together multiple fans. You also receive the mounting screws, a connector clip, installation guide, and warranty information. In Addition to everything included in the single fan, the bundle also provides you with the mini Cooler Master RGB controller and a three-way extension cable.

### **Quality and performance**

The MF120 Halo possesses 24 addressable RGB LEDs within the two rings embedded in the fan’s outer white plastic casing. Built strong with no notable give, the plastic is well made. Each corner comes preinstalled with rubber damping pads to reduce any noise caused by unwanted vibration. The MF120 Halo has nine blades with a specially curved design unique to the Master Fan series; this means more airflow, therefore, more cooling potential. Unfortunately, these fans are the loudest on the list at 30dB when at full speed and can get even louder when on a radiator. To lessen the sound, you can turn down the fan speed because the MF120 Halo is PWM-controlled. They can operate as low as 650RPM and a top speed of 1800RPM, so you can control your temps with confidence. Furthermore, the MF120 Halo provides 1.6mm H20 of static pressure and 41.8CFM, making these fans capable of either a case fan or radiator fan.

### **Lighting**

Featuring dual loops on either side of the fan, you’ll be able to enjoy the hypnotic lighting effects available inside and out. Additionally, each individual LED can be customized using popular light editing software such as ASUS Aura, MSI Mystic Light, and ASRock Polychrome sync. The Included mini RGB controller has six defined presets, which can be cycled using the controller’s button. But with the availability of lighting software, it serves more like a hub than a controller. The LEDs themselves are bight and bleed into the fan a little giving the blades a ghostly appearance outlined by the vibrant halo embedded into the casing. They may not be the brightest I’ve seen, but they are remarkable and add a lot of eye candy to any build.

### **Thoughts on price**

The MF120 Halos are relatively expensive as a single fan at just a little over $20USD and, at the time of this writing, the white edition three-pack is only available for pre-order on Amazon at the jaw-dropping price of over $170USD. But I would expect that price to go down significantly. As with most merchandise, the price fluctuates due to supply and demand, and I would say these are definitely in demand.

### **In conclusion**

I feel the MF120 Halo is a very good fan with the quality and performance you would expect from Cooler Master. Even though the three-packs price may be a little confusing, the price of a single fan is still affordable for most PC builders. You should never skimp out on your fans to save a few extra bucks; proper ventilation ensures your internal components will last longer and provide better performance across the board. With the MF120 Halos in your PC, not only will they look cool, they’ll keep your machine cool as well.

#### **PROS**

* 24 bright ARGB LEDs
* High performance
* PWM controlled
* Dual loop lighting
* Two-year warranty

#### **CONS**

* Noisy at full speed
* A little expensive
* Short cables

## **3.Corsair LL120 RGB White Edition**

The Corsair LL120 RGB is a premium quality fan with fantastic lighting and overall good performance. But the installation process is a headache. First off, you have to use a corsair RGB controller as the ARGB connectors are specific to corsair, kind of how Apple iPhones can only be used with Apple-specific charging cables. Once you get past the connector conspiracy and the over-engineered series of hubs and nodes, they are pretty good fans. But are very expensive.

### In the box

If you get a single fan, it comes with two connected cables. One is a 4-pin PWM connector, and the other is a Corsair-specific 4-pin ARGB and can only be used with Corsair controller hubs. Additionally, you receive the mounting screws, warranty information, and installation guide. In addition to everything included with the single fans, the bundle pack includes the Lighting Node Pro, the fan control hub, a 2-pin connector cable to join the lighting nod pro and the fan hub, and other required cables to connect everything together. All this extra hardware for ARGB fans is excessive, and Corsair should be a little embarrassed.

### **Quality and performance**

The overall product is stocky and durable. The Corsair LL120 RGB fans come with nine sturdy high-quality blades and hydrodynamic bearings. It’s a little disappointing not to see mag-lev bearings considering the price of these fans, but I guess that would only make an already expensive fan even more so. Each corner of the fan has a rubber anti-vibration pad that holds the fan away from your case, eliminating any rattle that may occur. The fan shroud is a very clean white with a Light Loop (which is where it gets the LL in the name) on the inner diameter of the shroud that has 12 LEDs and four LEDs within the central hub of the impeller. To help spread the light, the fan blades are frosted-white and angled in a way to maximize airflow and static pressure. However, the standoff pads lessen the full potential of the static pressure. If you want to maximize the ability for fans to push air through a radiator, you want as little leak out as possible, and sitting 4mm off the radiator allows a lot of air to be pushed out the sides unutilized. They offer a static pressure of 1.6mm h20 and airflow rated at 43.25CFM. Making them a decent hybrid fan.

### **Lighting**

With 16 LEDs per fan, the Corsair LL120 RGBs can create one spectacular light show. These fans are designed to be used with other Corsair products and software. To use these fans, you need the Corsair Lighting Node Pro or the Corsair Lighting Node CORE. The former comes with the three-pack and is intended to be used with the additional fan hub that is also provided. The latter is a combination of the two and is sold separately. This is where the real headache begins. First off, you have to connect the Lighting Node Pro to a 9-pin 2.0 internal USB header for control purposes, then provide power with the included SATA cable. Then you use the provided 2-pin connector to attach the Node to the fan hub. THEN you power THAT hub with a supplied SATA cable. Now you’re ready to connect your fans. Seems like a little much? Yeah, I thought so too. But even after all that, you get the satisfaction of seeing your new Corsair LL120 RGB fans shine with all kinds of patterns available with the Corsair iCUE software available on their website. Just make sure you connect your fans in the order you want to achieve the desired color patterns. The fun hub is numbered to make that process a little easier.

### **Thoughts on price**

At over $50USD per fan, the Corsair LL120 RGB is not cheap in the slightest. But, man, do they look nice. These fans are premium quality, but so is the price. I would recommend these fans to those of you who want to feel like you made a valuable purchase. And really, you would have a quality product in the end. But I think the price is steep. Even in the three-pack bundle, you don’t save a whole lot. I really like the fans; I just wish they were more affordable.

### **In conclusion**

The Corsair LL120 RGB fan is a high-end quality fan with high-end quality prices. They have decent airflow and static pressure, but the pads dilute that some. The real selling points of these fans, however, are the build quality and impressive LEDs. But getting everything hooked up is a hassle and should have included the Lighting Node CORE from the start. At the end of the day, if you want a quiet fan with dazzling ARGB LEDs and don’t mind paying more than double your average competing fans, then go right ahead. These are genuinely excellent fans.

#### **PROS**

* Excellent LEDs
* Premium quality
* Decent airflow
* Quiet
* Two-year warranty

#### **CONS**

* Expensive
* Pads make them less than ideal for radiators
* Complicated installation

## **4. Fractal Design Dynamic X2 GP-12**

The Fractal Design Dynamic X2 GP-12 is simplicity itself. This fan has a basic design with only a few modifications that make it stand out. With all the rage these days about RGB lighting, it may come as a shock that the Fractal Design Dynamic X2 GP-12 has no LEDs whatsoever. Making them an excellent option for the minimalist builds out there. Although they may not shine like a bowl of Skittles, they are stunning fans regardless.

### **In the box**

The Fractal Design Dynamic X2 GP-12 comes with a standard 3-pin fan connector, Rubber vibration damping pads, mounting screws, warranty information, and other product information. You don’t need anything else besides a screwdriver for these fans.

### **Quality and Performance**

The entire design of the Fractal Design Dynamic X2 GP-12 is engineered for performance as well as silence. The seven blades are embedded with wiring and are curved almost 90° from the inner fillet to the blade edge, reducing unwanted noise and turbulence while improving airflow. Fluted notches on the trailing edge near the impeller base enhance the fan’s aerodynamics, further decreasing the sound profile. With an estimated 100,000 MTTF, these fans have a long life expectancy thanks to their LLS (long-life sleeve) bearing and counter-balanced magnet reducing tension and wear. Among the top contenders of the 120mm list, the Fractal Design Dynamic X2 GP-12s have impressive airflow at 52.3CFM but a rather low static pressure of 0.88mm H20. Making them more ideal as a case fan than for a radiator.

### **Lighting**

The Fractal Design Dynamic X2 GP-12 has no LEDs.

### **Thoughts on Price**

Fractal Design went for performance rather than bling on the Fractal Design Dynamic X2 GP-12s, and you can tell. These fans are robust and of high quality for a great price. At less than $15USD, these fans are fantastic in both ability and price. All you silence freaks out there may want to check these fans out. At only 19.4dB, you will be quite happy with your purchase.

#### **PROS**

* Very quiet
* Inexpensive
* Powerful airflow
* Three-year warranty

#### **CONS**

* No PWM
* No LEDs
* Flimsy cable
* Not the best for radiators

## **5. Thermaltake Riing Quad 120mm**

The Thermaltake Riing Quad 120 is jam-packed with ARGB LEDs. And was the world's first four-ringed fan with 54 ARGB LEDs. While these fans may not be high on our list for performance, they are definitely the most vibrant and colorful of them all. You are able to buy these fans as either a single pack or in a three-pack bundle, which includes the required RGB controller unique to Thermaltake.

### **In the box**

In the single fan package, you get the Thermaltake Riing Quad 120mm fan with attached proprietary PWM and ARGB combination cable specific to Thermaltake. Thus, it requires their fan hub controller to connect to your motherboard. Additionally, you receive the mounting screws, warranty information, and other product papers. The three-pack bundle includes the previously mentioned fan hub controller and its accompanying cables.

### **Quality and performance**

The quality of these fans is top-notch. Just picking them up out of the package, they feel heavy-duty. And the amount of airflow is impressive; with 1.4mm H20 of static pressure and 40.9CFM, they do an excellent job at moving air, regardless of if you’re using it as a case fan or for a radiator. The corners have vibration damping pads and a hydraulic bearing, all to help reduce unwanted noise.

### **Lighting**

Thermaltake Riing Quad 120s are by far the most brilliant on the list when it comes to brightness. Due to the absurd amount of LEDs they crammed into this fan, you may even want to turn down the brightness in the Thermaltake RGB Plus software. Additionally, you can use Neon Maker for your ARGB customization needs, but the program is very in-depth, and you will need to tinker around with it to understand everything it can do. You can even control your rig’s lighting with the Thermaltake RGB Plus smartphone app or Amazon's Alexa. The Thermaltake Riing Quad 120 has an enormous range of possible light configurations so just mess around with the software until you have it just how you want it.

### **Thoughts on price**

These may not be the most expensive on our list, but they’re close. For just under $40USD per fan, I feel a lot of that goes towards the LEDs rather than towards performance. But I mean, hey, 54 LEDs look pretty darn cool. So if you’re looking for ARGB fans that are incredibly bright and customizable, price be damned, then these are for you.

#### **PROS**

* Bright LEDs
* Decent airflow
* Sturdy
* Extremely customizable lighting
* Two-year warranty

#### **CONS**

* Expensive
* A little loud at full speed
* Light transitions chunky at low transition speeds

## **6. Corsair iCUE QL120 RGB**

While it may be last on our list, it can not be easily dismissed as a “bad” fan. The iCUE QL120 RGB has a lot to offer in both performance and aesthetics. With four rings of LEDs, these fans are highly customizable using Corsair's iCUE software. These fans can be bought as either a single fan or in a three-pack bundle, which includes the Lighting Node CORE. The newer CORE model combines the older, more complicated hub and node combo.

### **In the box**

Opening the single fan package, you find the iCUE QL120 RGB with two cables. One is a 4-pin PWM compatible with any standard 4-pin header on your motherboard or compatible fan controller. The wires are almost two feet long, making them ideal for larger cases. If you go with the three-pack option, you also get the Lighting Node CORE and all of its required cables.

### **Quality and performance**

The iCUE QL120 RGB is a very capable fan, with aesthetics being the primary goal, it seems. Corsair heard their customers saying they wanted more LEDs, so that's what happened. With very little improvement upon other than more lights, these fans are a bit disappointing. Don’t get me wrong, they are great fans, but you would expect more from Corsair. They are basically the Corsair LL120s with more LEDs and worse performance all around. The iCUE QL120 RGB has nine blades and a static pressure of 1.55mm h20, and a rated airflow of 41.8CFM, which is less than the LL120s in both aspects, still make them great fans for both a case fan and a radiator fan.

### **Lighting**

The QL in iCUE QL120 RGB stands for Quad Loop because they have four individually addressable loops. They have two rings of LEDs on both the inside of the shroud and in the impeller platform with a total of 34 ARGB LEDs, giving you almost unlimited possibilities when it comes to lighting customization through the iCUE software. The lights are a little muted but not necessarily in a bad way. They give off a foggy vibe and are pleasing to look at. With the new Lighting Node CORE, the installation process is more straightforward, giving you more time to tweak your lighting profiles.

### **Thoughts on price**

Corsair is a well-known brand and has many fans, pun intended. But even a die-hard fan would be pressed to choose these over the LL series because the LL series have better everything besides LEDs. If you genuinely love Corsair and just want the iCUE QL120 RGBs simply because they look better, then be my guest. But in my opinion, the price is too steep for a downgrade in performance just for them to be more aesthetic.

### **In conclusion**

The iCUE QL120 RGB are beautiful fans with a lack of performance. “More RGB” seems to be the trend lately, and while that may be nice and make our rigs have that extra custom feel, companies shouldn’t sacrifice performance for vanity. The iCUE QL120 RGBs are nowhere close to being bad fans; it’s just disappointing to see the newer fans be worse than older models.

#### **PROS**

* 34 ARGB LEDs
* Quiet
* Good quality
* Respectable static pressure and airflow
* Two-year warranty

#### **CONS**

* Lower performance compared to older versions
* Expensive
* Diffused lighting

# **140mm**

## **1. Corsair ML140 Pro**

## Corsair is at it again with a top contender on our list. The Corsair ML140 Pro comes in a few different color options: White, Red, Blue, or a non-LED black version and is available as a single fan. Using Magnetic Levitation bearings, the Corsair ML140 Pro is a long-lived fan with almost no motor whine. The impressive airflow and decent static pressure make these fans ideal as either a case fan or radiator fan but are more optimized for the former.

### **In the box**

The Corsair ML140 Pro comes as a single fan or as a twin-pack bundle. As a single fan, you receive the Corsair ML140 Pro with two attached cables. One is a 4-pin PWM that connects to your motherboard, and the other is Corsair’s 4-pin RGB cable that connects to the controller hub. The bundle comes with everything in the single fan package plus the Lighting Node Pro and its accompanying components.

### **Quality and performance**

Possessing an impressive 97CFM of airflow, the Corsair ML140 Pro is excellent. Furthermore, these fans have a static pressure of 1.27mm H20, making them suitable for radiators as well. The Corsair ML140 Pros have revolutionary magnetic levitation bearings reducing friction and motor hum and prolonging the fan’s life.

### **Lighting**

With only four center-mounted non-addressable LEDs, the lighting is unimpressive for today's fans. While they do a decent job at making your case glow, you can’t change the colors without changing the fans themselves. But you can change the corner mounts to help customize the look of the fans. Maybe this is Corsair’s way of apologizing for the lackluster LEDs.

### **Thoughts on price**

For a fan with only static LEDs, the price is up there. You would think for over $30USD per fan that you’d be getting more than a solid color, especially since you have to use the Lighting Node Pro and Fan hub combo used for other ARGB fans in Corsairs line up. But with that being said, The Corsair ML140 Pro delivers high performance, and with everything considered, the price is reasonable.

### **In conclusion**

The Corsair ML140 Pro LED fans are pretty good overall. With exceptional airflow and a modest LED scheme, these fans will get the job done and still look good doing it all while being whisper quiet. These fans made top spot not by being flashy or cheap, but by performance alone. You can do better price-wise, but you’ll have some trouble finding a better performing 140mm fan.

#### **PROS**

* Excellent airflow
* Appreciable static pressure
* Robust quality
* Five-year warranty

#### **CONS**

* Non-addressable LEDs
* Thin cables
* A little pricey for non-ARGB fans

## **2. Phanteks PH-F140MP**

The Phanteks PH-F140MP is very basic in its design and has been engineered for performance. Without any additional bells or whistles, these fans do a great job providing quality cooling without stealing the entire show. And with an affordable price, the Phanteks PH-F140MP is just what any low profile rig needs.

### **In the box**

The Phanteks PH-F140MP comes as a single fan with pre-installed vibration damping pads and has a single 4-pin PWM connector. They also come with mounting screws, warranty information, and other product information.

### **Quality and performance**

With LEDs to concentrate on, the Phanteks PH-F140MP has been designed with quality and performance first. The outer casing is made of sturdy black plastic, while the blades are white. Using their unique blade design, the Phanteks PH-F140MP features “Maelström Vortex Booster II” technology, meaning the blades have a lip at the edge, creating a vortex providing a higher static pressure—making it ideal for radiators as well as a case fan. Additionally, the Phanteks PH-F140MP runs relatively quietly. Though, you may still hear them in an empty room.

### **Lighting**

The Phanteks PH-F140MP has no LEDs.

### **Thoughts on price**

For all the performance these fans boast, the price is a steal. Without all that RGB weighing them down, these fans are very affordable and attractive. The Phanteks PH-F140MPs are well worth the price, and I highly recommend them even though they have no bling.

### **In conclusion**

These fans are high-performance, but you wouldn’t know it by the price tag. Only when you dig deeper into the specs, do you find that these are a gem. If you want high quality and showing off is the last thing on your mind, you can’t go wrong here.

#### **PROS**

* Affordable
* High static pressure
* High airflow
* Five-year warranty

#### **CONS**

* No LEDs

## **3. ARCTIC P14 PWM**

The ARCTIC P14 PWM is another fan, made with performance first. These fans have no LEDs and have been designed to be used with radiators. With an astonishing static pressure and notable airflow rating, the ARCTIC P14 PWM can also be used as just a case fan as well.

### **In the box**

Packaged inside are the ARCTIC P14 PWM fan with a single 4-pin PWM connector, mounting screws, warranty information, and other product paperwork. Strangely there are no vibration damping pads included.

### **Quality and performance**

The ARCTIC P14 PWM has a pressure rating of 2.4mm h20, making them ideal for radiators. The fan design consists of 5 large swept-back blades with almost no tolerance between the blade tips and the inner shroud, ensuring maximum pressure. There is nothing flashy about the ARCTIC P14 PWM if you don't count the impeller’s cool-looking blades. Although these fans have impressive air stats, they can be quite noisy.

### **Lighting**

The ARCTIC P14 PWM has no LEDs.

### **Thoughts on price**

At less than $12USD, these fans are very affordable. With a price like this, you’d expect to get a poorly made product. But on the contrary, the ARCTIC P14 PWM is well made and well worth the money.

### **In conclusion**

The ARCTIC P14 PWM is a great fan. I just wish it was less noisy and came with damping pads. But for the price, they are pretty good and worth the investment. You can always use something like 3M adhesive pads to act as vibration dampers if needed.

#### **PROS**

* Affordable
* Powerful static pressure
* Good airflow
* Ten-year warranty

#### **CONS**

* Less than quiet
* No vibration damping pads
* No LEDs

## 

## **4. be quiet! Shadow Wings 2 BL090**

The be quiet! Shadow Wings 2 is by far the most silent on the entire list. But honestly, that's all they have going for them, other than they look super cool. These fans have a unique design on both the shroud and the blades. The be quiet! Shadow Wings 2 are for the most silent builds.

### **In the box**

The be quiet! Shadow Wings 2 comes with an attached 3-pin connector, which means it’s not PWM controlled, pushpins for mounting to your case, warranty information, and other product information papers.

### **Quality and performance**

As I mentioned earlier, and as the name suggests, these fans are super quiet with a max acoustic level of14.7dB. That is their main selling point. With no LEDs and, frankly, low airflow and static pressure ratings, the be quiet! Shadow Wings 2 is underwhelming. But for those of you looking for the quietest 140mm fan, this one’s hard to beat. Made of quality plastic with a rubberized frame and unique removable rubber vibration-damping inserts, the be quiet! Shadow Wings 2 provide sound-damping qualities, making them perfect for those who value silence above all else.

### **Lighting**

The be quiet! Shadow Wings 2 have no LEDs.

### **Thoughts on price**

Considering that the be quiet! Shadow Wings 2 has unimpressive stats and, if you ignore the acoustics, I don't think the price is agreeable. The pressure and airflow these possess are inferior to other fans of similar price. But if you want one of the most silent running fans on the market, then you may have just found what you’re looking for.

#### **PROS**

* Extremely quiet
* Sturdy
* Innovative design
* Three-year warranty

#### **CONS**

* Unimpressive static pressure and airflow
* No LEDs
* Not PWM controlled

# **200mm**

## **1. Phanteks PH-F200S**

The Phanteks PH-F200SP are simple fans with little curb appeal but boast an impressive amount of airflow. Additionally, these fans possess decent static pressure making them suited for either a case fan or a radiator fan. But in my opinion, more the former than the latter.

### **In the box**

Inside the package are the Phanteks PH-F200SP with a 3-pin connector (meaning no PWM control), an extension cable, vibration damping pads, mounting screws, warranty information, and other product info papers.

### **Quality and performance**

The Phanteks PH-F200SP has Maelström Vortex Booster technology on the blade tips and running longitudinally from the trailing edge, improving static pressure and aerodynamics, creating less turbulence providing more efficient airflow. The casing is made of rigid black plastic, while the impeller is white. They come with pre-installed vibration damping pads to lessen noise and boast a maximum acoustic level of 25dB, making them one of the quietest on the entire list, despite them being 200mm fans.

### **Lighting**

The Phanteks PH-F200SP has no LEDs.

### **Thoughts on price**

For a 200mm fan with airflow rated at 110.1CFM, these aren’t horribly priced. But I feel that because there are no LEDs, they could have given us a better price. The Phanteks PH-F200SP are really good fans and ultimately worth the price due to their superior design, making them one of the best hybrid fans.

### **In Conclusion**

What you have here is a quality 200mm fan with the capability to move enough air to be suitable for air-cooled rigs and powerful enough to be used on a radiator. Even though I would have liked to see PWM control, the Phanteks PH-F200SP is worth the investment for any build that isn’t focused on eye candy like RGB.

#### **PROS**

* Amazing airflow
* Decent static pressure
* Innovative design
* Included extension cable
* Five-year warranty

#### **CONS**

* Not PWM controlled
* No LEDs

## **2.** **Thermaltake Pure 20 LED Blue**

The Thermaltake Pure 20 LED fan seems outdated by today's standards but can still keep up with the rest of them as far as performance goes. The overall quality of this fan looks relatively cheap and flimsy. Maybe because it’s so big, and the entire thing is made of thin clear plastic.

### **In the box**

Opening the box, you find the Thermaltake Pure 20 LED fan with a 3-pin connector (No PWM), mounting screws, warranty information, and the rest of the product information. There are no vibration damping pads.

### **Quality and performance**

Like I mentioned previously, the fan seems fragile, and I wouldn’t want to drop it on a hard surface. The impeller’s 11 blades are notched on the trailing edge to increase aerodynamics and minimize turbulence, resulting in an impressive 129.6CFM. That would make the Thermaltake Pure 20 LED excellent as a case fan. While the airflow is exceptional, the static pressure is only 0.99mm H20 and wouldn’t do well on a radiator. The shroud is “shaved,” giving them a very thin outer casing, yet they are still rather chunky and can be challenging to fit in some 200mm cases. With their low price and scrawny build, you might expect some issues here and there. In fact, there have been multiple users report a clicking sound soon after installation. While others have reported years of use with no issues.

### **Lighting**

With only four shroud-mounted non-addressable LEDs, the lighting is less than spectacular, but the transparent blades do a decent enough job spreading it around. The LEDs are directly connected to the fan’s power source. Meaning if the fan is on, so are the LEDs. There are better lighting options out there for sure.

### **Thoughts on price**

For less than $15USD, why not? The price isn’t bad considering the amount of airflow the Thermaltake Pure 20 LED can move. Yeah, they may not be the prettiest or the most versatile; but they’re aging and doing it well for the most part. If you’re looking for a decent 200mm fan and on a budget, the Thermaltake Pure 20 LED will get the job done and not hurt your wallet.

#### **PROS**

* Phenomenal airflow
* Very affordable
* Multiple colors available
* Three-year warranty

#### **CONS**

* Cheaply made
* Non-addressable LEDs
* Not PWM controlled

You first-time builders should keep in mind that the fans are arguably the most crucial component of your rig. Everything generates heat, and without any cooling, it would all burn out rather quickly. At the end of the day, it’s the performance that matters, but a little flair never hurts. Just make sure you choose quality over aesthetics, so your machine lasts, and you save money by not replacing parts that have worn out prematurely. Hopefully, you have found this article helpful and were able to decide which white case fans on our list suit your needs.