

PlaneAC FAQs

1. What is PlaneAC? PlaneAC is a high cooling capacity, DC powered (12v or 24v) portable air-conditioning unit.
2. Does PlaneAC use ice? No. PlaneAC is a self-contained portable air-conditioner that uses refrigerant.
3. What kind of refrigerant is used? R134a
4. How much does the unit weigh? 50lbs
5. How much air does the unit move? 14v units move 620CFM combined. 24v units move 868CFM combined. Output air has been measured at nearly 40mph!
6. Can PlaneAC cool the entire cockpit, and will we feel the air-movement from the pilot's seat if we set the unit in the baggage area? YES! PlaneAC is designed to cool the entire cockpit and bring the cabin to a comfortable temperature within minutes. We supply a 4" output air duct that can be adapted as desired to move the airflow. PlaneAC provides nearly 40mph of output airflow and it can be felt by the pilot and passengers while the cabin is being cooled.
7. How many amps does the unit draw? 14v units draw 50amps continuous at the highest setting. 28v units draw about 46amps continuous at the highest setting.
8. Is a 100amp Alternator required? NO! While a 100amp alternator is recommended, it is NOT required. If you have a smaller alternator, PlaneAC can make use of a secondary Battery input to help reduce load demand from the alternator.
9. How is PlaneAC powered? The main power source for PlaneAC is from the aircrafts electrical system (Alternator) connected to the units primary Aircraft input. There is a second Battery input that allows PlaneAC to be powered by an external battery.
10. Can PlaneAC be powered by a battery? YES! The genius of PlaneAC is that it can be powered by an independent battery source via the Battery input. This allows

PlaneAC to be powered independently of the aircraft electrical system. This is especially useful when pre-cooling the plane or if using a smaller Alternator to reduce load demand.

11. Can PlaneAC be powered by both inputs at the same time? YES! When the main Aircraft input AND Battery input are connected PlaneAC can share load when both are ON or move load from one source to the other. If both inputs are connected and selected PlaneAC will draw from whichever source has the highest voltage. Generally, this will be the alternator. If the alternator voltage sags, the unit will draw proportionately from both sources.
12. How are inputs selected? PlaneAC includes a remote control that can be mounted conveniently within the pilot's reach. The remote features a toggle for the Aircraft input and a toggle for the Battery input. This allows for easy selection, either Aircraft, Battery, or Both. The remote control also features a dial for the output fan speed.
13. Is the External battery included? No.
14. What External Battery should be used? If you are using an external battery, PlaneAC can be powered from any battery of at least 50ah capacity. We recommend LiFePO4 batteries as they are some of the safest technology on the market. We have used BattleBorn batteries with great success.
15. Will the aircraft alternator charge the external battery through the PlaneAC inputs? No. PlaneAC inputs will NOT cross-feed. Any external battery used to power the PlaneAC will need to be recharged like any other portable device's battery after use.
16. Does PlaneAC need a Circuit Breaker? Our units include 2 onboard 50amp circuit breakers, one for each input. We recommend an additional 50amp circuit breaker be installed within the reach of the pilot and power sent back to the unit from there.
17. What gauge wire should be run for PlaneAC? We recommend 6ga wire or 4ga for exceptionally long runs. Consult with your A&P for best practice.

18. What input connectors are used? PlaneAC uses Anderson SB50 plugs, and we include 2 with handles and terminals for your convenience.
19. What is the installation process? Install an additional 50amp circuit breaker (optional). Run 6ga or 4ga power wire back to the unit and ground. Install an external battery and wire to the Battery input (optional). Place PlaneAC in the aircraft and vent the exhaust. Connect drain hose. Secure PlaneAC for flight. Enjoy air-conditioning!
20. How long does installation take? Typical installation is about 1 to 3 hours for the initial installation. After that, PlaneAC can be removed and reinstalled in a matter of minutes.
21. Does PlaneAC require an STC? No. PlaneAC is a self-contained portable unit and does NOT require an STC for installation.
22. Does waste heat need to be vented out? For maximum efficiency the waste heat should be exhausted out of the cabin area. This can be done in many ways. We recommend venting into the tail-section through the rear baggage wall, either by cutting a hole in the baggage wall and setting PlaneAC up tight to the back wall so that the exhaust flange fits through the hole for cleanest installation, or by connecting the included exhaust duct to the unit's flange and aircraft side flange. To increase efficiency, users can consider adding louvers or screens to a rear inspection panel to allow the hot air to quickly exit the tail section.
23. Is there a drain for condensate water? Yes. Excess water is drained out of the unit via a 3/8 barb drain port on the side of the unit. We include drain hose that should be routed to drain out of the bottom of the aircraft or Teed into the existing aircraft drain hose.
24. What is included with the purchase? We include the following: PlaneAC unit 12v or 24v. Remote control with Black and White decal. Pre-made 'plug and play' remote harness. SB50 connectors, terminals, and handles. Top output flange and screws, elbow duct, and output tube. Rear AC side exhaust flange and screws. Rear Aircraft side flange/grate and screws. Exhaust duct. Drain tube.

25. How many BTUs of cooling does PlaneAC provide? 12v PlaneAC units provide a minimum of 8000+ BTUs of actual cooling with a compressor rating of 11,500BTU. 24v units are capable of even higher cooling BTUs with compressor rating of 12,000BTU.
26. Is 8000+ BTU enough to cool the entire cabin? YES! While exact BTU numbers vary based on temperature, humidity, power setting, exhaust pressure from the empennage etc. We use real-world measurements NOT exaggerated desktop calculations like used by others in the industry. We provide a true minimum BTU. We use this as a base measurement that all units will easily obtain. It is quite likely with proper venting and set-up that your unit will exceed this number.
27. How much temperature drop can PlaneAC produce? PlaneAC is capable of a 20* temperature drop from ambient temperature and will cool off an entire cockpit quickly.
28. Can I remove my unit when not needed? Absolutely. Our units are designed to be easily installed and removed providing flexibility in use. You are not committed to any weight and balance or CG changes. If you want to remove the unit to save the useful load in the Winter months or if additional utility is required per flight, you can remove your PlaneAC in minutes.
29. Do you provide service and repair? Yes. All PlaneAC units are serviceable, and we provide repair and tune-up services at our facility. Our units are extremely well built and generally require no maintenance, but should you need anything we are always here to keep your air-conditioner cooling.