

# Close Comfort Q&A



This guide will help you explain:

1. Why Close Comfort is unique: it is unlike any other portable air conditioner
2. How Close Comfort can protect your customers from huge electricity bills
3. How to answer the common questions that customers ask
4. Where to find more answers for the other questions they ask

## 1 Close Comfort is Unique – a Comparison

Close Comfort AC	Normal AC (Split, Window, Portable with pipe)
<p>No other air conditioner can provide so much cooling comfort, especially during hot, humid nights, on so little electricity. The equivalent of just four light bulbs (the old fashioned bulbs). The cooling capacity is just ¼ ton.</p>  <p><b>The running cost is about 50 Rupees a night (&lt; 300 unit tariff)</b></p>	<p>A normal AC (1.5 ton) takes the same power as up to 24 or more light bulbs, all the time in hot weather.</p> <p><b>The running cost is about 300 Rupees a night (600 Rupees with a generator including fuel).</b></p>
<p>Close Comfort keeps running through load shedding on most UPS / Battery power supplies.</p>	<p>A normal AC needs a generator to keep running through load shedding.</p>
<p>Close Comfort’s special tent protects you and your loved ones from mosquitos.</p>	<p>A ceiling fan helps with mosquito protection but makes the AC work harder (costing you even more electricity) and is very noisy.</p>
<p>Close Comfort needs no pipes, no water drain, no installation and practically no maintenance.</p>	<p>Normal ACs need to be installed with pipes. Split and Window ACs need professional installers, pipes have to be installed, and maybe new wiring as well.</p>
<p>Close Comfort can be moved anywhere you need it: you can even use it outside (but keep it dry, please!) It weighs only 17kg and is on wheels so you can move it easily.</p>	<p>Normal ACs can only be used where they are installed. Normal portable ACs weigh more than 35 kg.</p>
<p>Close Comfort works with the windows open so you sleep with fresh air all night.</p>	<p>Normal ACs require the windows and doors closed so the room air becomes stale and bad for health after a few hours, especially with three or more people.</p>
<p>Close Comfort is quiet, around 50 dB. Wake to hear the Azaan and birds singing.</p>	<p>With the windows closed and a ceiling fan running, it is hard to hear the Azaan and bird song in the morning.</p>

## 2 How Close Comfort protects your customers from huge electricity bills

All normal air conditioners (and air coolers) aim to cool the entire room by mixing the cool air with a strong fan.

In Pakistan walls are not insulated, so heat passes through easily and the inside surface of the wall heats the air in the room.

Most of the electricity used by a normal AC is used to cool the walls, which is impossible and walls don't complain about being hot, only people complain.

Close Comfort keeps cool air away from the walls and focused only on you, so you receive enough cooling comfort with 15-20% of the electricity needed for a normal AC (Window, Split, Inverter, Portable).

## 3 Common Questions and Answers

### 3.1 Why doesn't Close Comfort have a stronger throw of cold air like other ACs?

An AC with a strong blast of cold air feels great in the shop, but wastes your money because most of the cold air runs up against the hot walls.

The whole idea of this AC is to just cool you and your friends or family, not the walls, floor and furniture. With more cool air, you will be no more comfortable, but your monthly electricity bill will be much higher.

### 3.2 Where does the hot air go? Is it better with exhaust pipe?

*Surely the room gets hotter if the hot air comes out inside the room. Isn't it better to send it outside with a pipe?*

Close Comfort uses so little power that the air coming out is warm, not hot. The warm air goes straight to the ceiling and loses its heat through the ceiling. Try it: climb on a ladder and you just might detect a tiny temperature rise with a sensitive thermometer.

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A normal portable AC uses at least 4 times as much power so the air coming out of the pipe is hot. But, the air that goes out is replaced with more hot air coming through doors and windows, so the room only gets slightly cooler, and you will still use 200 – 300 Rupees worth of electricity a night, much more if you keep it running with a generator through load shedding.

### 3.3 Are there any health benefits?

Yes, lots.

First, with a UPS you get uninterrupted sleep through load shedding so you wake feeling refreshed and ready to enjoy life.

Second the tent keeps out insects at night protecting you from bites, dengue and malaria.

Third, with the windows open at night, you sleep in fresh air. With a family all sleeping together in a room with a split AC, the air is never refreshed. Harmful air builds up through the night and everyone shares it.

Users have commented to us that with Close Comfort, they don't experience that nasty itchy eye feeling from normal air conditioners when they wake up.

Finally the tent gives you some privacy: you can leave the doors and windows open but people cannot see you inside the tent.

### 3.4 How long does it take to cool the tent?

Only 5-10 minutes. You can pop into bed for a nap during the day whenever you feel like it.

### 3.5 But, when I get out of the tent, it feels so hot in the room outside.

Sure. It does feel hot because you got used to the cool air inside the tent. If you want the room to be cooler, keep the windows and door open at night.

### **3.6 How much area does it cool?**

Close Comfort blows a gentle stream of cool air at people: you need to sit within 4-5 feet of Close Comfort to feel cool.

Close Comfort works best with the air flowing around your face and neck.

Close Comfort will keep a family cool sitting together on the couch, watching a movie on TV.

If you want to cool a crowd, use a normal AC: that's what they are designed for.

### **3.7 Isn't it uncomfortably hot when you get out of the tent?**

Even with a split AC, when you go to the bathroom or another room not air conditioned, it seems hot. You will want to stay in bed with Close Comfort!

### **3.8 How can anyone sleep in that tent? It seems so small.**

Until a few decades ago, nearly everyone in Pakistan slept in a mosquito net tent. Once you try Close Comfort's patented tent, made right here in Pakistan to the highest quality standards, you will never go back. It is just so comfortable inside.

Try it for yourself.

### **3.9 How does using Close Comfort help the environment?**

You use so much less energy, helping to reduce pollution and heat emissions, and keeping your environment more comfortable and healthy for everyone.

### **3.10 Someone told me you can only use it for sleeping.**

Not at all. We use it every day in summer at work. We set up Close Comfort on a chair or table to keep our faces cool. It's magic: if your face feels cool, your whole body feels comfortable.

### **3.11 What's the warranty and where do I get after-sales service.**

Warranty is 12 months, 24 months for compressor. Call us on 0310 571 6505 for after-sales service. Initially we will provide service in Lahore, later elsewhere in Pakistan.

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## **4 More Questions and Answers**

### **4.1 Can I adjust the temperature setting?**

There's no need to. Close Comfort automatically regulates the air temperature, maintaining the most comfortable air temperature for you in any environment. At night, if you feel cold, use a light blanket or quilt.

### **4.2 Does humidity affect the cooling?**

Yes: it makes Close Comfort work much better. It provides more cooling power automatically and works best in humid conditions.

### **4.3 Can Close Comfort be used in extreme heat?**

Close Comfort is made to provide relief from the heat, so it can be used in any indoor climate up to 44°C. In extreme conditions we recommend you use a patented Close Comfort bed tent. Using Close Comfort for extended time periods above 35°C may shorten the compressor life.

### **4.4 I like to feel really cold with my AC. Close Comfort does not seem to do that.**

One person we know who likes to feel cold in his large office uses three Close Comforts aimed at himself.

Close Comfort may not be best for you. But, be ready for those high electricity bills.

### **4.5 Does it need maintenance?**

Just check the filters every 2 weeks or so and clean them using water if needed. Otherwise no maintenance is required.

### **4.6 Does it need a special power outlet?**

No. The unit can be plugged into any standard power outlet.

#### **4.7 Does the water have to be emptied out?**

Close Comfort requires no ducting, plumbing or piping of any kind. Water condensed from humid air is re-evaporated. Distilled water can be collected if you need it to top up your batteries. The water is not suitable for drinking.

In rare conditions, you might need to empty the water tray. But we have never experienced that with our current model.

### **5 Technology and Power-Related Questions and Answers**

#### **5.1 Can I save energy with a DC Inverter AC?**

Surely, a DC inverter AC only uses 300 Watts once it is cooled the room down, and so is just as economical to run?

Answer:

DC Inverter ACs are designed for well insulated buildings common in USA, Japan, UK, Canada and Europe. With a well-insulated room, the power consumption to maintain room temperature with moderate outdoor temperatures can be quite low, around 300- 500 Watts.

In Pakistan, buildings have no insulation at all and it is so much hotter outside in summer. Therefore a DC Inverter AC in Pakistan requires just as much power (often more) than a normal split AC of equivalent performance. Some people report energy savings from using DC inverters. However, this is because you can obtain energy savings just by installing a new AC with clean heat exchangers and a new compressor which is not worn out.

#### **5.2 How big does the UPS and Battery need to be?**

In Lahore we recommend a 1000 – 1200 Watt sine-wave UPS and two 115 Amp-hour capacity deep cycle batteries. We provide a separate sheet with recommended suppliers.

#### **5.3 Do I need special batteries?**

Deep cycle batteries (such as TAB Tubular Batteries) cost 60-70% more initially but last for years. Normal car batteries are not designed for use with UPS power supplies and last only 8-10 months, so they cost 40-50% more per unit of electricity supplied.

#### **5.4 What if load shedding is bad in my area, say 12-18 hours a day?**

We recommend you consider a small generator which can run 5-10 Close Comfort ACs, so you can share power and running costs with your neighbours.

#### **5.5 Can Close Comfort run on solar power?**

Yes, but you will need a solar system with a 230 Volt inverter. Close Comfort requires normal AC power. Two panels of 250 Watts each should provide enough power. Make sure you get your solar dealer to demonstrate it working before you pay for the installation.

#### **5.6 Can I use daytime solar power and store it in batteries for night time use?**

Yes, if you have sufficient battery storage. Make sure you ask for a hybrid solar inverter that provides 230 Volt AC power. The battery storage capacity will depend on the availability of mains power at night. Plan on at least two 115 Amp-hours storage capacity batteries with 50% load shedding. If you want to rely entirely on solar power, you will need up to four times more battery storage at a cost of at least Rs 120,000 – 150,000.

#### **5.7 What cooling technology does Close Comfort use?**

Close Comfort uses conventional compressor refrigeration, just like your refrigerator or freezer. It has a completely welded refrigeration circuit that will last as long as your fridge or freezer.

### **5.8 Does Close Comfort use a refrigerant?**

Yes. It uses R134a, which is a fluorinated refrigerant gas which is covered by the Montreal Protocol protecting the ozone layer. R134a does not harm the ozone layer significantly.

### **5.9 What kind of compressor does Close Comfort use?**

Close Comfort uses a simple, quiet, electric reciprocating compressor, just like your refrigerator or freezer.

### **5.10 What's the life of this AC?**

Depending on its usage, if maintained well, the life of the Close Comfort unit is equal to or greater than the life of a standard air conditioner. It has no parts exposed to the outside weather conditions so should last longer.

### **5.11 Does it need spare parts?**

No. Close Comfort has nothing that wears out and needs replacing. Spare parts are available from your supplier if you misplace a filter or another removable part. Call 0310 571 6505 for spares.

We can send you a special part to prop open the cold air cover if you need it.