

Please read the installation and the operating Instructions carefully before installing and using it.  
Specifications are subject to change without prior notice.  
The contents of this catalogue are accurate as of January 2017.  
Due to printing considerations, the actual colours may vary slightly from those shown in the catalogue.  
All graphics are provided merely for the purpose of illustrating a point.



Do not add or replace the refrigerant other than the specified type. The manufacturer is not responsible for the damage and deterioration in safety due to usage of other refrigerant.



# AIR CONDITIONER BUYING GUIDE

Helps you to buy the perfect  
AC for your home



# Most important features to look for in an Indoor Unit

Air Quality

Blower Size

Safety

## ① Air Quality

### Types of pollutants

1] **Pollen** – There are countless types of Pollen suspended in the air. They can cause allergies & aggravate Asthma.

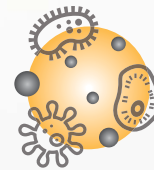


2] **Bacteria** – They are responsible for bacterial diseases.

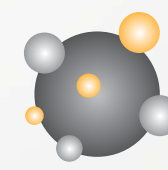


3] **PM2.5** – There are two types of PM2.5 particles.

a) **Dust particles** – These become the carriers for Bacteria & Viruses.



b) **Carbon particles** – These are present in the gases emitted by vehicles & factories.





# PM2.5: AN UNSEEN POLLUTANT HARMING US

## Centre to 'censor' real-time data

New Delhi: The Centre on Tuesday announced that all air quality data generated from monitoring systems run by Delhi Pollution Control Committee (DPCC) and India Meteorological Department (IMD) will have to be sent to CPCB for "validation". The move has evoked sharp reactions from experts, who say real-time air quality data doesn't require any editing.

DPCC has already reported about the government's attempt to "dress up" air pollution data, saying DPCC has done its "best" to provide "true" or "unadorned" air quality data to the public.

In a statement released on Tuesday, the Union government said the data "will be routinely sent to CPCB for analysis and authorised air quality information will be communicated to DPCC on a daily basis for further dissemination to the public".

It is not clear if the ministry will do away with the current process of releasing real-time data to DPCC and IMD but experts fear such a process may delay information dissemination and leave scope for manipulation of data. In order to provide authentic air quality information to

people of Delhi, a joint meeting of IMD, MoEF, CPCB, DPCC and IMD was held on March 18. The release said, "All monitoring systems will follow a uniform protocol and valid data will be sent to CPCB for analysis and authorised air quality information will be communicated to DPCC on a daily basis for further dissemination to the public".

It is not clear if the ministry will do away with the current process of releasing real-time data to DPCC and IMD but experts fear such a process may delay information dissemination and leave scope for manipulation of data. In order to provide authentic air quality information to

## Toxic air beating down kids, can trigger lung damage

GREY SKIES Children at risk of inhaling higher volume of polluted air

New Delhi: The air is toxic and children are breathing it in. Children breathe lower than adults per unit of body weight and inhale more respiratory particles. They are more likely to breathe through their mouth, which increases the pollution inhaled as they breathe. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

## As air pollution level soars, attempt to 'dress up' city's data?

New Delhi: The air is toxic and children are breathing it in. Children breathe lower than adults per unit of body weight and inhale more respiratory particles. They are more likely to breathe through their mouth, which increases the pollution inhaled as they breathe. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

## Focus On Harmful Effects Of Pollutants On Kids' Health

New Delhi: Children are more vulnerable to air pollution than adults. Their respiratory systems are still developing and they are more likely to breathe through their mouth, which increases the pollution inhaled as they breathe. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

Children spend more time outdoors than adults, which increases their exposure to pollution. Children are also more likely to play outdoors, which increases their exposure to pollution.

City	PM 2.5 Level	City	PM 2.5 Level
Gwalior	176	Lucknow	163
Allahabad	170	Kolkata	134
Patna	149	Mumbai	109
Raipur	144	Ahmedabad	141
Delhi	153	Hyderabad	112
Ludhiana	122	Bhopal	106
Kanpur	220	Varanasi	306
Agra	141	Noida	768
Amritsar	134	Ludhiana	102
Gurgaon	280	Patiala	102
Jodhpur	105	Rajkot	294
Faridabad	193	Vishakhapatnam	163
Varanasi	185	Vadodara	294
Pune	210	Jamshedpur	218
Bengaluru	310	Goa	203
Chennai	179		

# PM2.5: ADVERSE HEALTH EFFECTS



ASTHMA



LUNG CANCER



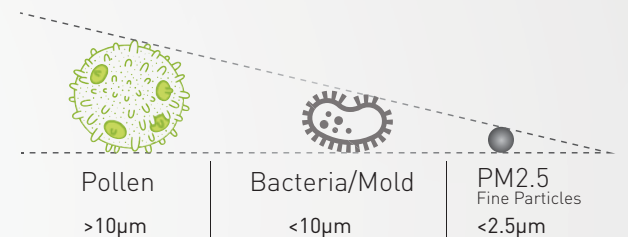
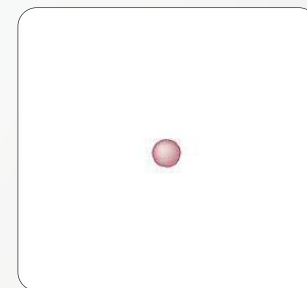
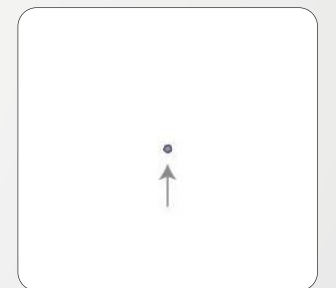
BIRTH DEFECTS



PREMATURE DEATHS

## What is PM2.5?

### Fine Particulate matter size comparison

Human Hair  
(about 70µm wide)  
µm = MicrometerGrain of sand  
(about 50µm wide)PM10  
(less than 10µm wide)PM2.5  
(less than 2.5µm wide)

## An AC can also purify room air

INDOOR UNIT

INDOOR UNIT

# 3 STAGE AIR PURIFICATION

## ENJOY POLLUTANT FREE AIR, 365 DAYS A YEAR.

### PM2.5 Filter

As the air passes through the PM2.5 Filter, it traps the PM2.5 particles in it hence purifying the air passing through it.



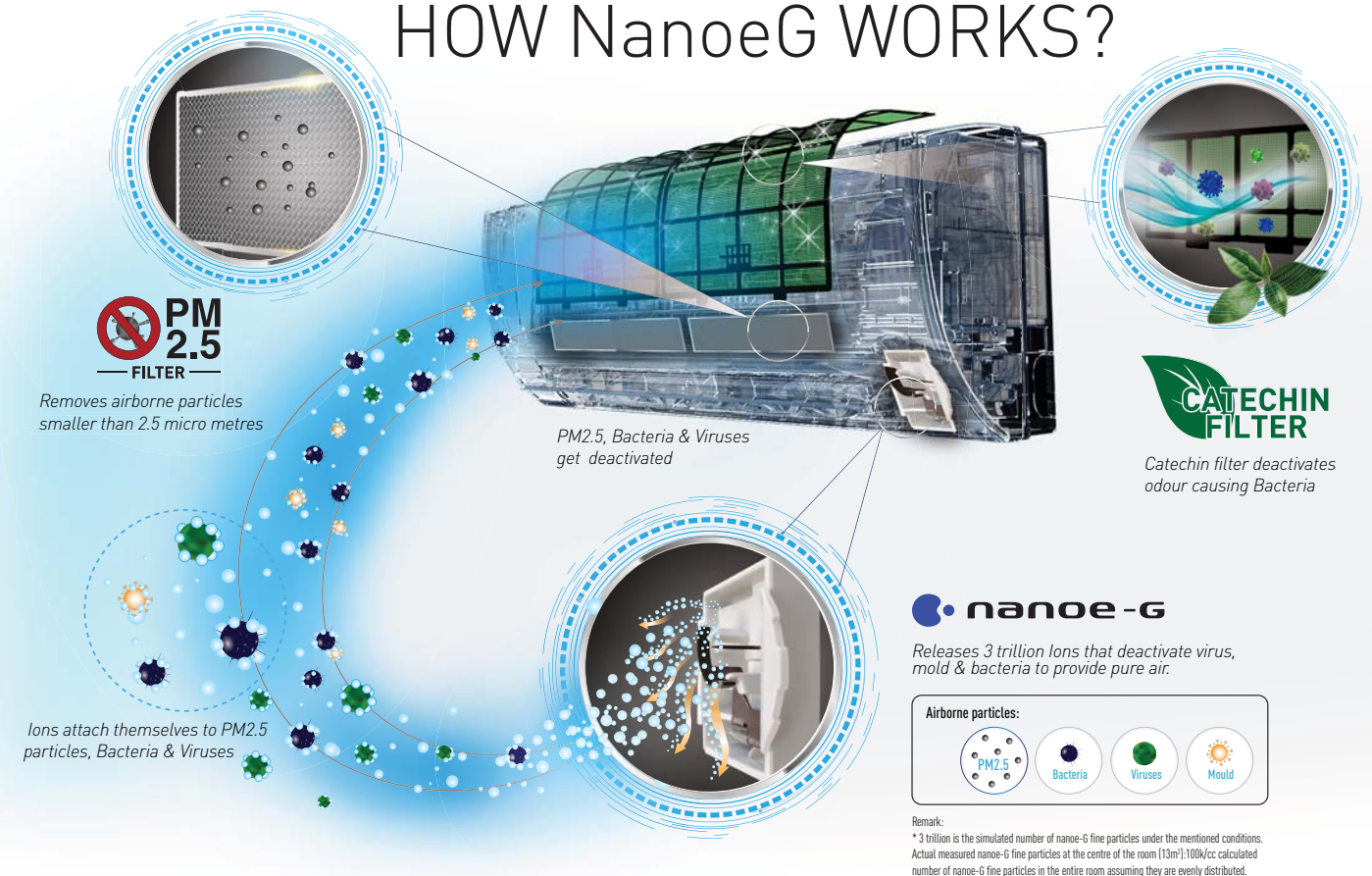
### Catechin Filter



### Removes Bacteria & odour

Catechin Filter is coated with tea leaf extracts that deactivates Bacteria and bad odours circulating in the room atmosphere hence making the air fresh and odour-free.

## HOW NanoeG WORKS?



### PM2.5 Active Filtration – NanoeG

NanoeG is a technology available exclusively with Panasonic Air Conditioners for removal of PM2.5 particles. In this, the NanoeG unit releases 3 trillion ions in the room. As these ions spread through the room, they attach themselves to Bacteria, Viruses & dust particles rendering them inactive. When these PM2.5 particles along with ions are sucked back into the AC, these pollutants get attached to evaporator grill of the indoor unit and air passing out is free of these pollutants.

**nanoe-G** Releases 3 trillions\*

**Airborne particles:**



STAGE3



INDOOR  
UNIT

INDOOR  
UNIT

## ② Blower Size

More air  
discharge

Blows more air in the room

Airflow  
till far

Airflow is stronger hence  
travels further

Higher  
CFM

Higher Cubic Feet Per Minute  
(CFM) air exchange through  
the IDU\* ensures that there is  
no feeling of suffocation and  
room is adequately ventilated

\*Indoor Unit

Panasonic

WIDER IDU



42 inches

PS18SKY

SMALLER IDU



36 inches

SMALLER IDU



36 inches

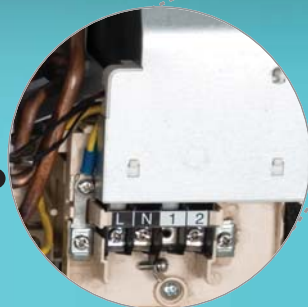
### ③ Fire safety

Panasonic Air Conditioner Indoor unit PCB housing material is Fire Retardant type. Therefore, in case Fire is generated inside PCB housing due to a short circuit, Fire won't come outside the metal box & it will be stopped there itself without damaging the surroundings or any other part.

Panasonic



Protective metal casing on electrical circuit box



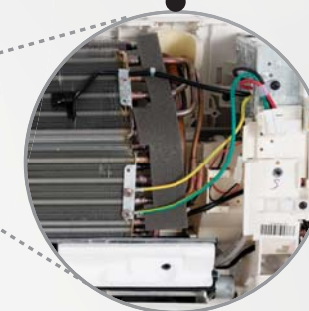
PS18SKY



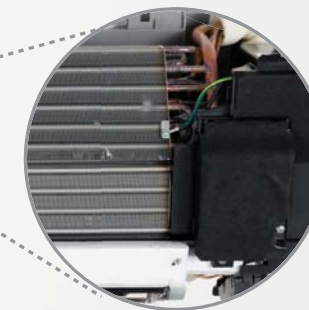
This is what can happen to IDU without protective casing on Electric circuit



No protective casing on electrical circuit box



Plastic casing



Plastic casing



No casing



OUTDOOR  
UNIT

OUTDOOR  
UNIT

# What to look for in an outdoor unit

Tubing

Corrosion  
Resistance

Size of Heat  
Exchanger

Quality of  
Condenser

Fan  
Blades

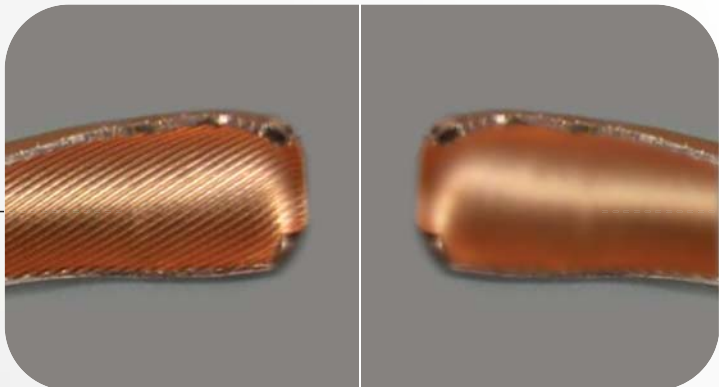


Tubing

Panasonic ACs feature Corrugated **Copper tubing** that is capable of better heat transfer as compared to Non Corrugated copper tubing. It cools the refrigerant gas faster & **enhances energy efficiency**.

Panasonic

Other Brand



- Larger surface area because of corrugation
- 2X-heat transfer speed

Copper Tubing

- No corrugation
- X-heat transfer speed

COPPER TUBING

OTHER BRAND  
DISADVANTAGES

PANASONIC  
ADVANTAGES

Lower thermal conductivity

Higher thermal conductivity

Delayed cooling process

Cools down instantly to enhance efficiency

Slow heat exchange

Up to 2X faster heat exchange  
(corrugated copper tubes)



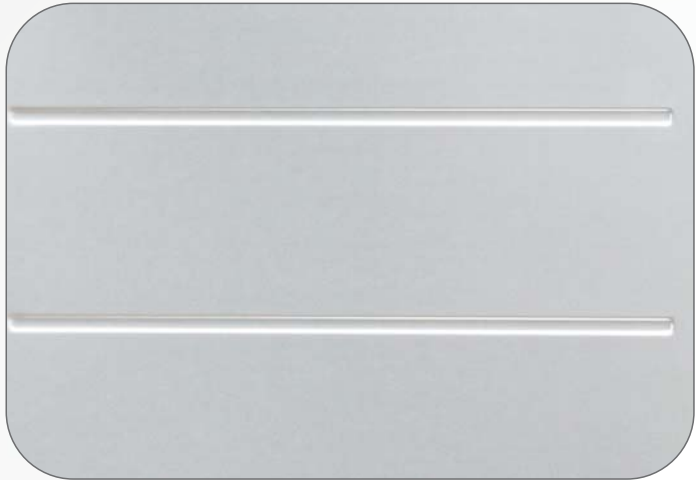
Corrosion  
Resistance

Panasonic is the only brand offering 5 year rust warranty on Air Conditioner ODU\*.

The external metal casing of the outdoor unit is made up of Superdyma metal sheet which is highly rust resistant. This makes the outdoor unit rust free and eliminates the need for painting or any other kind of maintenance.



Panasonic

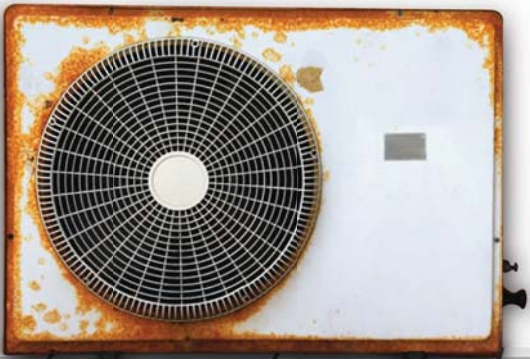


Superdyma Metal sheet

After 3 years of use



PS18SKY



OTHER BRAND  
DISADVANTAGES

SUPERDYMA  
ADVANTAGES

Prone to corrosion

Corrosion-free

Regular  
maintenance needed

No maintenance cost

Shorter life

Longer life as compared  
to painted ODUs

\*Applicable to ODU with Superdyma metal sheet

OUTDOOR  
UNIT

OUTDOOR  
UNIT

Size of Heat  
Exchanger



In an inch-to-inch comparison, Panasonic has one of the **biggest Heat Exchangers** in the category. This **ensures faster & better cooling** even at high outdoor ambient temperature of around 52° C.

OTHER BRAND  
DISADVANTAGES

PANASONIC  
ADVANTAGES

Regular  
Design

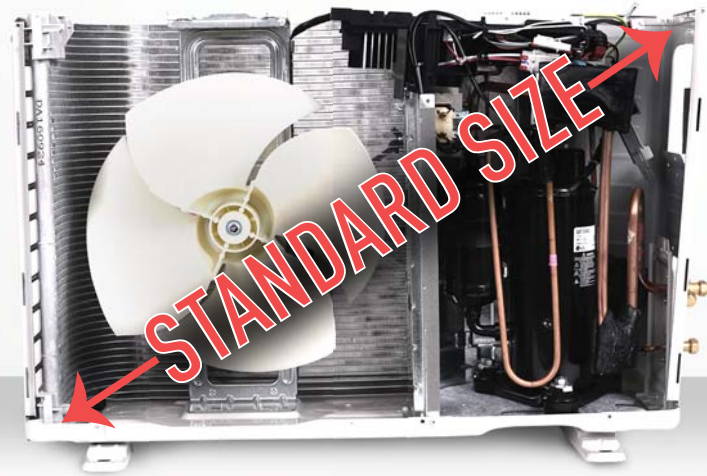
XXL Design

Small Heat  
Exchanger

Large Heat  
Exchanger

Slow  
Cooling

Quick  
Cooling



Panasonic  
PS18SKY

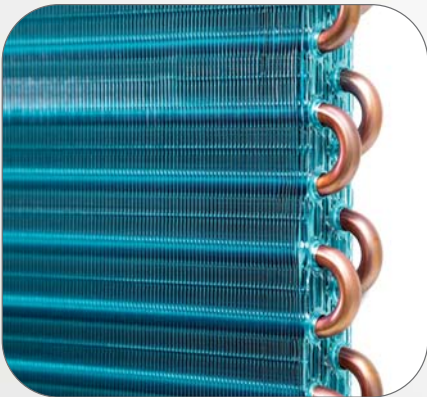
\*T&C Apply: Optimum performance is till 46 degree after which once the ambient temperature crosses 46 degree, the performance of machine gets de-rated



Quality of  
Condenser

Panasonic ACs have **Blue Fin Condensers** that have an anti-rust coating. **This enhances the life of the condenser.** The condenser also has higher Fins Per Inch which ensures **increased efficiency due to better heat exchange.**

Panasonic



Blue Fin Condenser

Panasonic ~ 20 Fins Per Inch  
Other Brand ~ 16 Fins Per Inch

ADVANTAGE OF BLUE FIN CONDENSER

OTHER BRAND  
DISADVANTAGES

PANASONIC  
ADVANTAGES

No protection  
from rust

Anti-rust coating

Prone to corrosion  
from salty air, dust,  
wind & sunlight

Salty air, dust,  
wind & sunlight resistant

Shorter life

Longer life

Other Brand



- Aluminum Condenser
- No protective Coating

Panasonic



- Copper Condenser
- Anti-rust Coating

OUTDOOR  
UNIT

OUTDOOR  
UNIT

Fan Blades

Panasonic Air Conditioners feature **Twin Blades** that accelerate the condenser cooling process that **save you power, cool the room faster & ensure lower load on the compressor even at high ambient temp. up to 52° C.**

OTHER BRANDS  
DISADVANTAGES

PANASONIC  
ADVANTAGES

Lesser distance  
between blades

More distance  
between blades

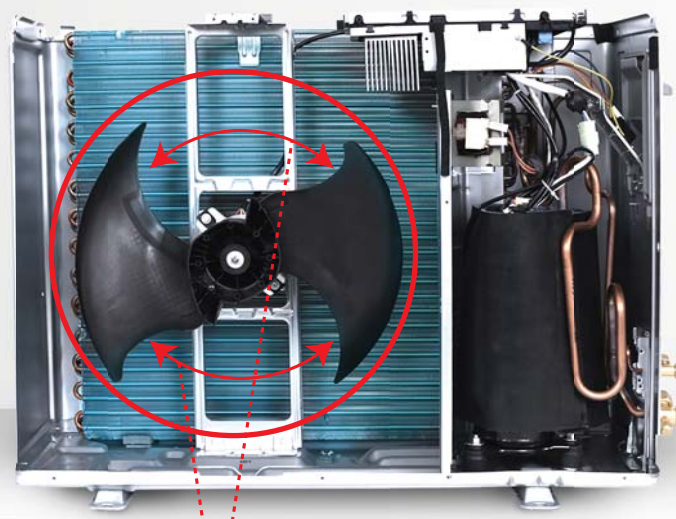
Much slower  
suction of air

Quicker  
suction of air

High energy  
consumption

Low energy  
consumption

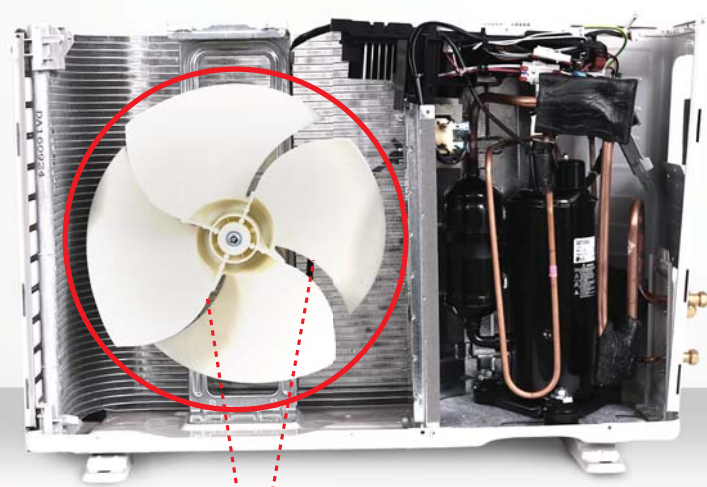
Panasonic



Twin Blades

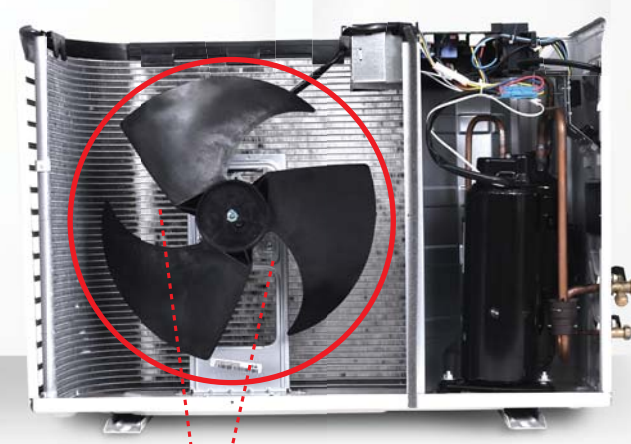
More Inter-blade Space

PS18SKY



4 Blades

Very Less Inter-blade Space

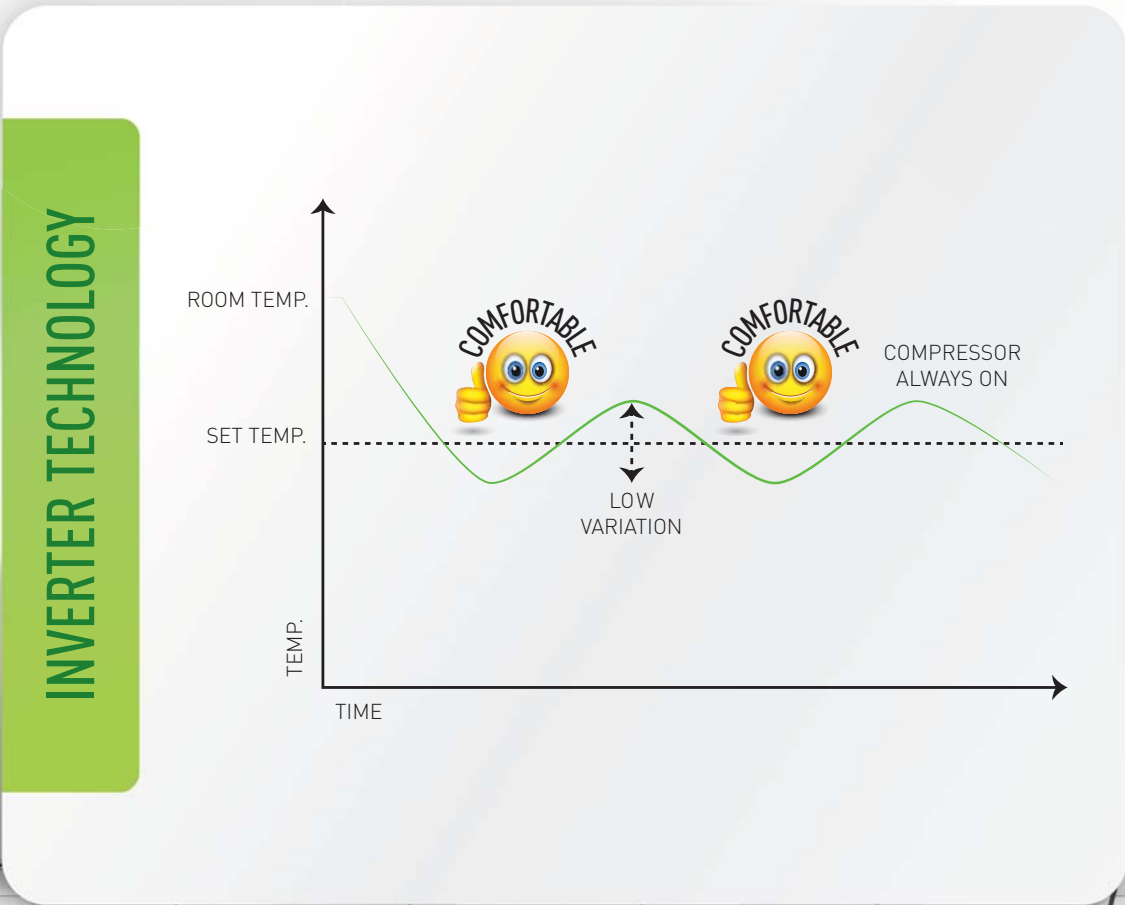


3 Blades

Less Inter-blade Space



# WHAT IS THE BENEFIT OF INVERTER TECHNOLOGY?



## WHAT'S SPECIAL ABOUT PANASONIC INVERTER ACS?

### OTHER BRANDS

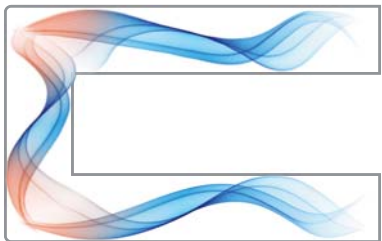
R410 gas + Aluminum/ multi-channel condenser  
= Has high risk of gas leakage

Aluminum has lower tensile strength

High oxidation, hence faces problem of **pinholes**.

In case of leakage, Aluminum condenser needs replacement. High cost involved.

Has joints at right angle which creates chances of leakage as R410 is a high pressure gas



MCC = Aluminum

### PANASONIC

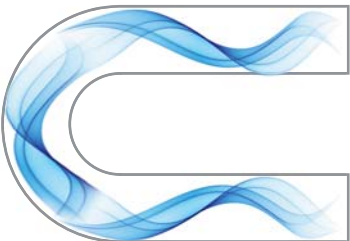
R410 gas + Copper Tubing  
= Has low risk of gas leakage

Copper has higher tensile strength

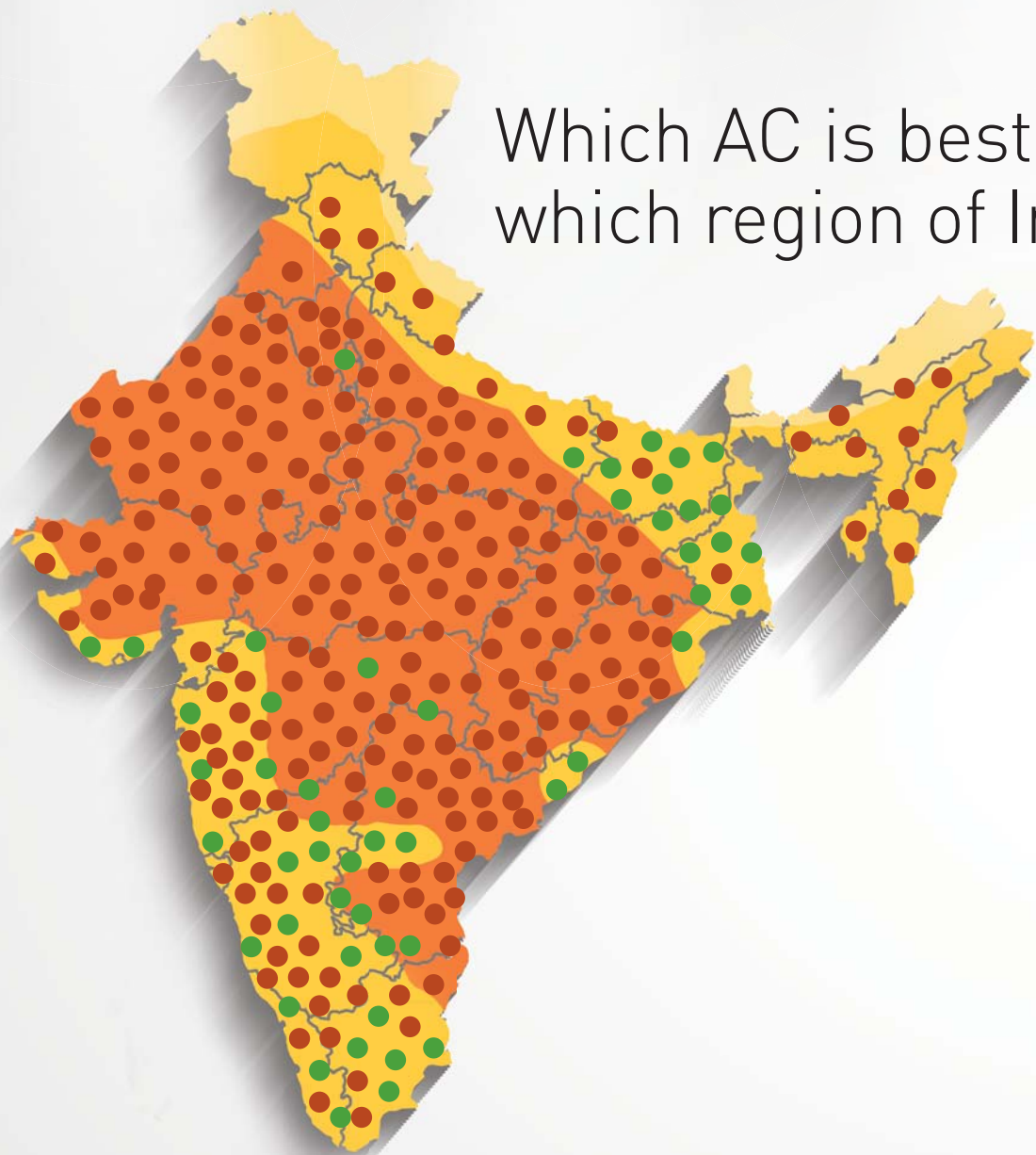
Low oxidation, hence is long lasting.

Can be easily repaired in case a fault appears

Has rounded joints which can withstand pressure of R410 gas easily



Which AC is best for which region of India?



■ Inverter ACs

Best for coastal regions where temp. does not cross 38-40° C

■ Fixed Speed ACs

Best for landlocked regions where temp. usually remains between 41~52° C as shown in the map during peak summer.

When you choose an Inverter AC, prefer the one that has Copper tubing and NOT Aluminum tubing/ multi-channel condenser.

*Panasonic Inverter ACs feature Copper Tubing.*

\*T&C Apply: Optimum performance is till 46 degree, after which, once the ambient temperature crosses 46 degree, the performance of machine gets de-rated





# INSTALLATION OF INVERTER AC

## Requirements

Installation of an Inverter AC is a highly skilled process.

It needs a trained technician and tools that are precise.

Any technician without a proper kit & skills might install the AC incorrectly which could be hazardous.



Skilled Technician is required

Inverter Installation cannot be done without Vacuum Pump



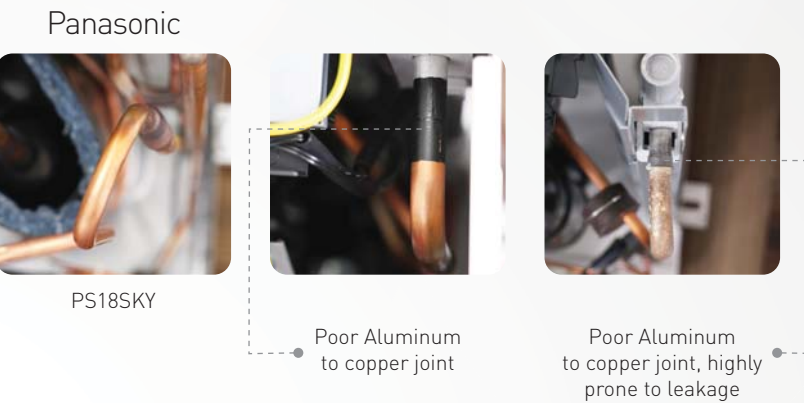
Proper Flaring & Cutting Tools required

Panasonic Specialized tool kit for Inverter Installation

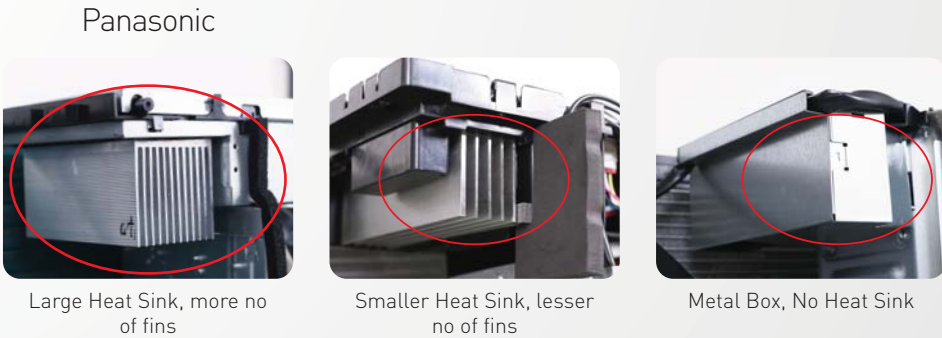


# HOW IS PANASONIC INVERTER AC BETTER?

Panasonic Inverter AC features copper tubing throughout. It has higher tensile strength and is long lasting.



Heat Sinks are needed to dissipate the heat generated in the controller unit of the inverter and prevent the AC from derating (slow down or stop cooling in case of high ambient temperatures)



Panasonic Inverter AC features a Large Heat Sink that has more plates which gives more area for the temperature to dissipate. So even in high ambient temperatures, the AC won't stop cooling.

Even the wiring inside is insulated to prevent burning or fire hazard.

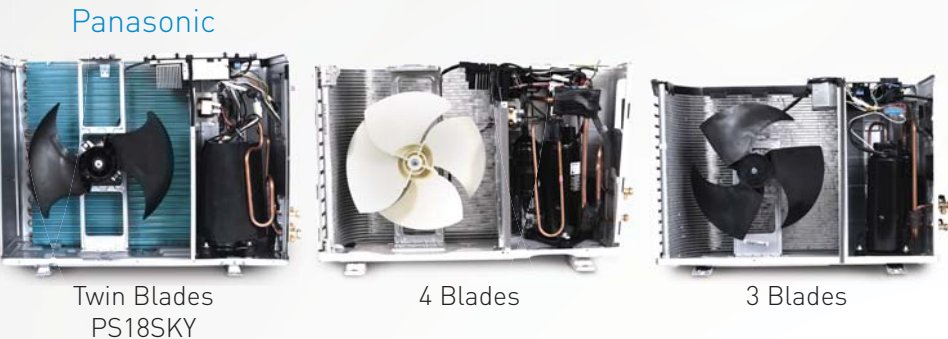
\*T&C Apply: Optimum performance is till 46 degree after which once the ambient temperature crosses 46 degree, the performance of machine gets de-rated



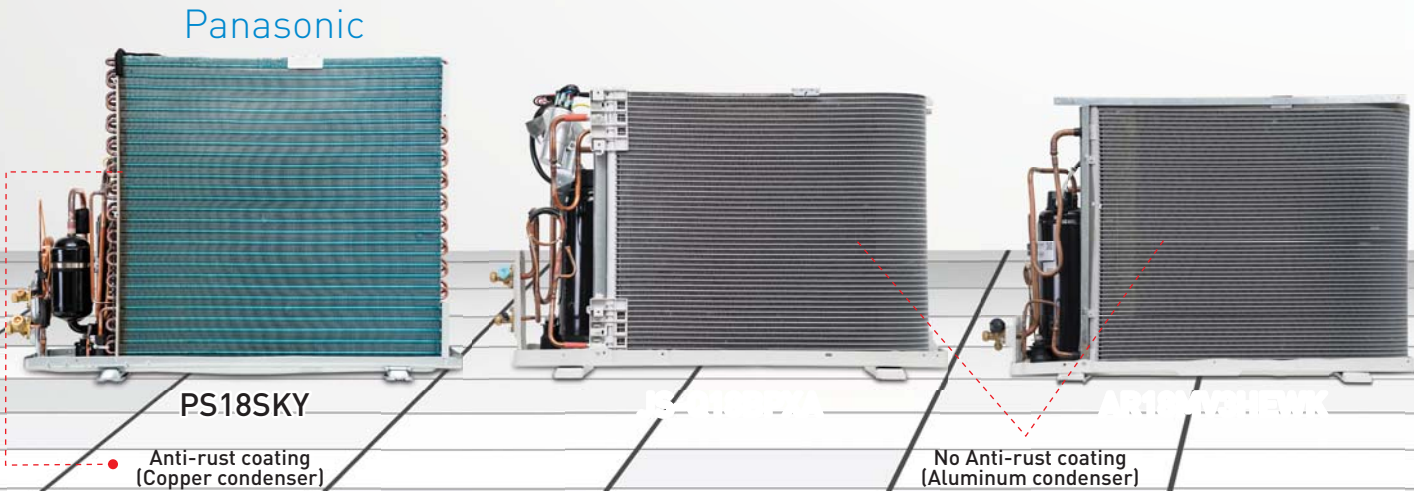
HOW IS PANASONIC INVERTER AC BETTER?



Panasonic Inverter ACs feature Twin Blades that allow for more air to be circulated and hence ensure faster cooling.



Blue Fin Condenser has a special anti-rust coating that makes it really long lasting. These condenser tubes are made of Copper that are better than the Aluminum Condenser that other brands offer.



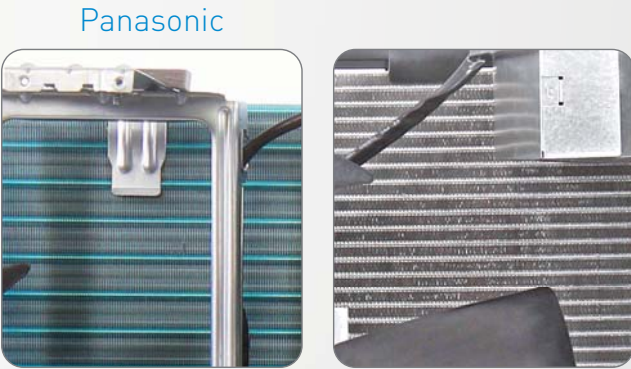
HOW IS PANASONIC INVERTER AC BETTER?



Panasonic Fan Motors are installed on a bracket that is attached to the main body. This ensures there are no unnecessary vibrations and keeps the noise levels low.



Also, the wiring is neatly tucked behind the bracket to ensure maximum safety.



Don't compromise on quality to save a few thousand rupees