



# AIR CONDITIONING AERO SERIES ECONAVI





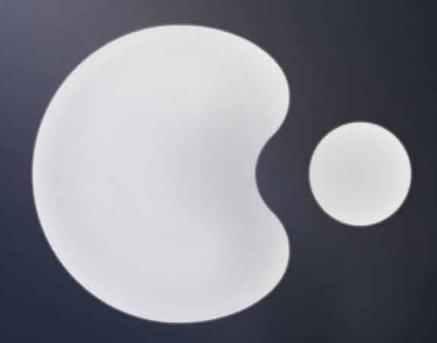
At Panasonic Air Conditioners,
we want to deliver more than just cooling or heating solutions.
We want to create Total Air Solutions that let you enjoy
Quality Indoor Air.

WE IMPROVE THE QUALITY OF AIR, SO YOU CAN IMPROVE THE QUALITY OF LIFE.





Iwao Uchiyama (Department of Occupational Health, National Institute of Public Health)
"Air and Human Beings: from the Physiological Viewpoint" (1999) https://ci.ni.ac.jo/naid/110008447936/
"3: Heat illness Prevention (Chapter 3) in "Heat illness Environmental Health Manual 2018".
P.32, Figure3-2 by Ministry of the Environment, Government of Japan. http://www.mbgt.env.go.jp/pdf/manual/heatillness\_manual\_3-1.pdf



# THE nanoe™ TECHNOLOGY



nanoe<sup>™</sup> Technology is Panasonic's unique technology which involves its special expertise at the nanometer level. It deodorises and inhibits the growth of bacteria and viruses for a fresh and clean indoor environment.\*

AIR IS LIFE

AIR IS COMFORT

AIR IS ENERGY



# CLASS LEADING FEATURES



# WI-FI READY\*

The power is in your hands with our new Panasonic Wi-Fi Controller and App. Making sure your home is the perfect temperature for when you arrive has never been easier.

\*Additional WI-Fi Adapter (CZ-TACG1) required.



# **CLEAN & HEALTHY AIR**

nanoe-G utilises nano-technology's fine particles to purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a quality living environment.



# **ENERGY SAVING TECHNOLOGY**

ECONAVI sensors and INVERTER technology work together to moderate the temperature according to room usage. By adapting to the way you live and optimising operation, this unique feature makes the air conditioning in your home more energy efficient and keeps you comfortable throughout the day and night.

# CONTROL, COMFORT & REASSURANCE



# SHOWER COOLING/ FAST COOLING

Panasonic's new AEROWINGS features twin motorised blades, together with iAUTOX technology to deliver precise control of airflow direction, providing both Shower Cooling and Fast Cooling for a perfect and comfortable environment.



# QUIET OPERATION

Panasonic systems are among the quietest in the world, so you can enjoy the comfort of running your air conditioner at night and still have a relaxing sleep. The outdoor unit is also very quiet which means you don't have to worry about keeping your neighbours up either.



# LATEST REFRIGERANT

One of Panasonic's principles has always been to sustain the environment around us. Therefore, we use the more ozone friendly refrigerant R32 for this new product. It is especially suitable for use in air conditioning and results in better energy efficiency.

# RELIABLE COMFORT COMES FROM RELIABLE TECHNOLOGY

# **DISCREET COMFORT**

A Panasonic air conditioner should be the hard-working hero you never notice. From noise measurements, to environmental performance and even operating ease, we repeatedly test our models to make sure they keep your home comfortable without ever intruding on your life.



# **TESTED DURABILITY**

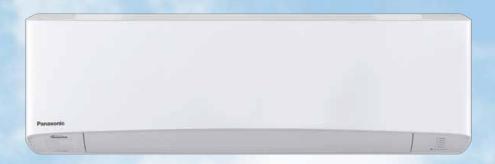
We simulate continuous operation under the harshest of conditions, subject the outdoor units to wind and rain tests and then examine every mechanism to ensure we are delivering a rugged product you can depend on for many years.



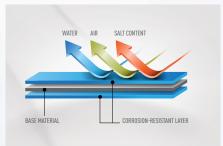
# **SHOCK RESISTANCE**

We love our air conditioners but that doesn't mean we go easy on them. We simulate impacts, vibrations, drops and stacking issues the units might face in transportation and storage, so we know they will be ready for action when they reach your home.











# AUSSIE TEMPERATURES

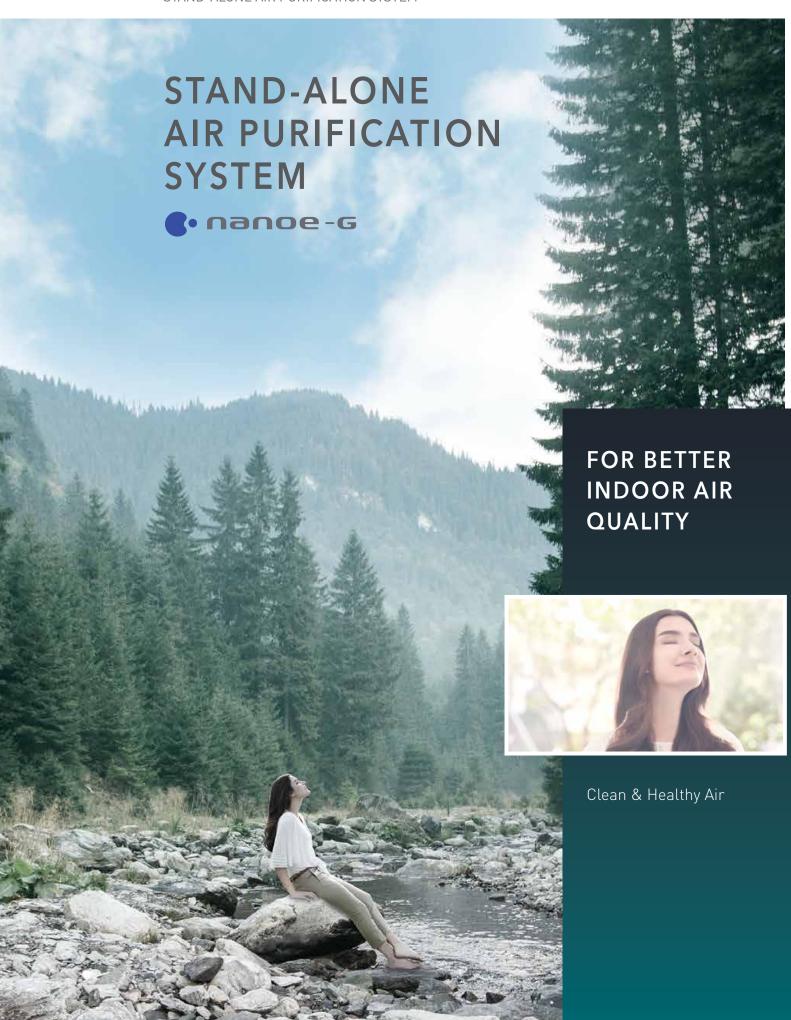
Our air conditioning systems boast an outstanding operating temperature range. Cooling operation is possible even when it is a scorching +46°C outside, which is perfect for Australia's hot summer days. The heating operation is designed to operate even when it's a freezing -15°C outside, so even the coldest parts of Australia are covered.

# **BUILT TOUGH**

Panasonic outdoor units are built to last in the harsh Australian environment. To ensure you will enjoy many years of reliable comfort from your air conditioner the internal components of the outdoor unit are coated with a special blue coating that protects the unit from the damaging effects of salty air, dust, wind and rain.

# COUNT ON PANASONIC

Panasonic air conditioners are manufactured to the highest quality standards to ensure years of reliable comfort. We even back our reliability by offering a 5 years full parts and labour warranty.





# Breathe Clean & Healthy Air

For overall wellbeing, Panasonic Air Conditioners feature an advanced air purification system called Nanoe-G, which releases active ions that attach to particles as small as PM2.5.

# How nanoe-G works:





# REMOVES AIRBORNE PARTICLES

(Up to 99%\*1 \*2)

Removal of 99% of particle pollution (PM2.5)\*1 and airborne particles\*2 such as bacteria, viruses and mould.



# DEACTIVATES ADHESIVE PARTICLES & DEODORISES ADHESIVE ODOURS

(Up to 99%\*3)

Deactivates 99%\*3 of adhesive micro-organisms and deodorises adhesive odours.



# IN-FILTER DEACTIVATION (Up to 99%\*4)

Deactivates 99%\*4 of bacteria and viruses trapped in the filter.

NOTE: "3 trillion is the simulated number of nanoe-G fine particles under the mentioned conditions. Actual measured nanoe-G fine particles at the centre of the room (13m²): 100k/cc calculated number of nanoe-G fine particles in the entire room assuming they are evenly distributed. \*1PM2.5 Removal was certified by FCR Research Institute, Inc. Test Report no: 25034 PM2.5: Cigarette Smoke (las PM2.5). Effectiveness is measured on 0.3 µm-2.5 µm. (Specific size only). This removal effect is not proven for all the airborne toxic substances. \*2 Airborne Removal was certified by Kitasato Research Center for Environmental Science KRCES-Bio. Test Report no., 23\_0182 Bacteria, Staphylococcus aureus (NBRC 12732) KRCES-Env. Test Report no: 22\_0008. Virus: Escherichia coli phage (aX-174 ATCC 13706-B1) Influenza [H1IN1) 2009 Virus. KRCES-Env. Test Report no: 23\_0140 Mould: Penicillium pinophilum (NBRC 6345). \*3 Adhesive Deactivation was certified by Japan Food Research Laboratories. Test Report number: 11047933001-02 Bacteria: Staphylococcus aureus (NBRC 12732) Test Report number: 11073649001-02 Virus: Bacteriophage (Phi X 174 NBRC 103405) Test Report number: 11047937001-02 Mould: C/adosporium cladosporioides (N BRC 6348) Adhesive odour deodorisation was certified by ODOR-AIR SERVICE Co. Ltd. Test Report No. 13-1204. \*4In-Filter Deactivation was certified by Japan Food Research Laboratories Test Report number; 12037932001 Virus: Escherichia coli phage (aX-174 ATCC 13706-B1) In-Filter Deactivation was certified by Virus. \*4 \*2 & \*3 & \*4 All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

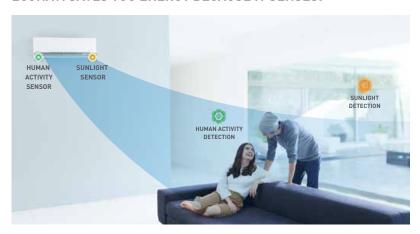




# **Enjoy Ultimate Comfort With Energy Savings**

ECONAVI has two sensors – Human Activity Sensor and Sunlight Sensor. Together, they monitor human location, movement, absence, and sunlight intensity to use energy more efficiently.

# **ECONAVI SAVES YOU ENERGY BECAUSE IT SENSES:**





Where you are.



When you leave the room.



When you are less active.



Whether it's a sunny day or at night.

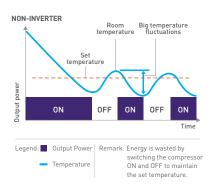


Adapts rhythmic temperature control after detecting low activity level.

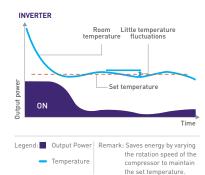


# Precise Temperature Control

INVERTER prevents wasteful energy consumption by varying the compressor rotation speed to maintain the set temperature without sacrificing your comfort.



A conventional non-INVERTER air conditioner can only operate at a constant speed which is too powerful to maintain the set temperature. Thus, it switches the compressor on and off repeatedly. This results in wider temperature fluctuations leading to wasteful consumption of energy.



The Panasonic INVERTER air conditioner varies the rotation speed of the compressor, providing a precise method of maintaining the set temperature. Thus, Panasonic INVERTER air conditioners give you exceptional energy saving performance while ensuring you stay comfortable at all times.

# Precise temperature control with a wide power output range enables an INVERTER air conditioner to meet different room occupancy levels – thus ensuring constant comfort. MAXIMUM POWER Compressor rotation speed: HIGH When required, the unit operates at full power: Power: 4.00kW MEDIUM POWER Normal condition Power: 3.50kW

**MINIMUM POWER** 

Power: 0.90kW

Graph shows the CS/CU-Z35TKR wide power output range during cooling.

Compressor rotation speed:

When not required, the unit

operates at low power to save energy.

# SHOWER COOLING FOR YOUR EXTRAORDINARY COMFORT

# AEROWINGS

SHOWER COOLING is the feeling that gently washes over you like a cool morning. After reaching the set temperature, AEROWINGS directs airflow upwards to spread cool air evenly across the room, and showers down for endless comfort.



# **How SHOWER COOLING works:**





- 1 Cool air is directed upwards.
- 2 Cool air spreads evenly and showers down.
- Room is evenly cooled down.

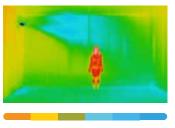
# SHOWER COOLING AIRFLOW ASSESSMENT

# **AIRFLOW SMOKE TEST**



Instead of blowing cold air directly onto people,
AEROWINGS directs airflow upwards over a wider area, then showers down gently and evenly across the room.

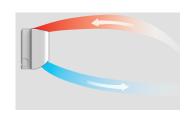
# TEMPERATURE DISTRIBUTION TEST



warmer → cooler

AEROWINGS directs cool air further and higher towards the ceiling to avoid direct cooling.

# **TOP AIR INTAKE**



Hot air is drawn in from the top, and cool air is discharged from the bottom to facilitate cool air showering down over the entire area.

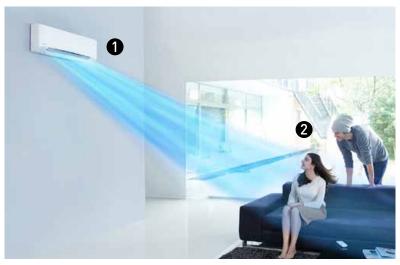
Note: Based on Panasonic In House Research

# FAST COOLING FOR YOU TO FEEL COMFORT INSTANTLY

# AEROWINGS

Features twin motorised blades that direct airflow downwards, delivering concentrated cool air to cool down the room faster, providing you with a unique FAST COOLING experience.

# How FAST COOLING works in AERO Series:







- Concentrated cool air is delivered straight to you.
- 2 The steady airflow cools you down quickly.

# **AUTOMATIC FAN SPEED**



iAUTO-X will automatically switch fan speed from low to super high depending on the temperature difference between the room and the set temperature.



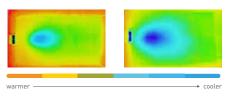
# **FAST COOLING AIRFLOW ASSESSMENT**

# AIRFLOW SMOKE TEST



AEROWINGS directs airflow downwards for a fast cooling effect.

# **TEMPERATURE DISTRIBUTION TEST**



# CONVENTIONAL COOLING

Cool air blows
downwards and cools
the room at a slow
pace, resulting in
uneven cooling.
The edge of the room
remains warm.

# FAST COOLING

Concentrated airflow cools instantly.

Room is evenly cooled.

Note: Based on Panasonic In House Research.

# WALL-MOUNTED : AERO SERIES ECONAVI REVERSE CYCLE INVERTER (Z SERIES)







Wireless



CZ-RD514C Wired Remote Controller (Optional)



CZ-TACG1 Wi-Fi Adapter (Optional)







CS-Z50TKR | CS-Z60TKR | CS-Z71TKR | CS-Z80TKR

# **SPECIFICATIONS**

MODEL		[240V / 1 Phase / 50Hz]		CS-Z25TKR	CS-Z35TKR	CS-Z42TKR	CS-Z50TKR	CS-Z60TKR	CS-Z71TKR	CS-Z80TKR
				[CU-Z25TKR]	[CU-Z35TKR]	[CU-Z42TKR]	[CU-Z50TKR]	[CU-Z60TKR]	[CU-Z71TKR]	[CU-Z80TKR]
Cooling / Heating Capacity		(min-max)	kW	2.50 (0.90~3.00) 3.20 (0.80~5.00)	3.50 (0.90~4.00) 4.30 (0.80~5.80)	4,20 (0.90~5.00) 5.10 (0.90~7.10)	5.00 (0.90~6.00) 6.00 (0.90~8.00)	6.00 (1.70~7.10) 7.20 (1.70~8.50)	7.10 (1.70~8.10) 8.00 (1.70~9.90)	8.00 (2.30~9.00) 9.00 (2.20~11.00)
		(min-max)	Btu/h	8,530 (3,070~10,200) 10,900 (2,730~17,100)	11,900 (3,070~13,600) 14,700 (2,730~19,800)	14,300 (3,070~17,100) 17,400 (3,070~24,200)	17,100 (3,070~20,500) 20,500 (3,070~27,300)	20,500 (5,800~24,200) 24,600 (5,800~29,000)	24,200 (5,800~27,600) 27,300 (5.800~33,800)	27,300 (7,840~30,700 30,700 (7,500~37,500
Airflow		Indoor	L/s	200/205	207/210	222 <mark>/222</mark>	335/325	340/340	355/355	370/370
Dehu	mid		L/h	1.5	2.0	2.4	2.8	3.3	4.1	4.7
Electrical Data		Running Current	А	2.30/2.90	3.65/4.40	4.70/5.90	5.10/5.80	7.00/7.80	8.60/9.20	10.90/11.30
		Power Input	kW	0.50 (0.21~0.75) 0.62 (0.175~1.30)	0.80 (0.21~1.06) 0.94 (0.175~1.56)	1.07 (0.215~1.60) 1.34 (0.245~2.25)	1.13 (0.23~2.05) 1.31 (0.26~2.65)	1.58 (0.44~2.20) 1.78 (0.40~2.50)	1.97 (0.43~2.48) 2.11 (0.38~3.00)	2.32 (0.46~2.82) 2.41 (0.50~3.30)
	/ EER P / COP		W/W W/W	4.89/5.00 5.07/5.16	4.31/4.38 4.52/4.57	3.88/3.93 3.77/3.81	4.38/4.42 4.54/4.58	3.77/3.80 4.02/4.04	3.58/3.60 3.77/3.79	3.43/3.45 3.71/3.73
Star Rating				5.0 5.5	4.0 4.5	3.0 3.0	4.0 4.5	3.0 3.5	2.5 3.0	2.0 2.5
	Sound Pressu	Indoor (	Hi/L/Q-Lo)	43/25/19 42/27/21	44/26/19 46/29/21	47/30/23 46/31/27	47/34/31 45/33/29	47/36/33 47/35/32	49/37/34 49/37/34	51/38/35 50/38/35
	Level*1 dB(A)		or (Hi / Q-Lo)	47/- <mark>47/</mark> -	49/- <b>50/</b> -	47/42 <mark>47/42</mark>	48/43 48/43	53/48 53/48	54/49 54/49	55/50 55/50
	Sound Power	Level dB Outdo	or (Hi / Q-Lo)	62/- <mark>62/</mark> -	64/- <mark>65/</mark> -	62/57 62/57	62/57 <mark>62/57</mark>	67/62 <mark>67/62</mark>	68/63 68/63	69/64 69/64
Net Weight		Indoor (Outdoor)	kg	10(32)	10(32)	10(43)	13(44)	13(50)	13(50)	13(60)
Dimensions		Indoor (H x W x D) Outdoor (H x W x D)	mm mm	295 x 919 x 194 542 x 780 x 289	295 x 919 x 194 542 x 780 x 289	295 x 919 x 194 695 x 875 x 320	302 x 1120 x 236 695 x 875 x 320	302 x 1120x 236 695 x 875 x 320	302 x 1120 x 236 695 x 875 x320	302 x 1120 x 236 795 x 875 x 320
Pipe 9	Size	Liquid Side	mm/(inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
		Gas Side	mm/(inch)	9.52 (3/8)	9.52 (3/8)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)	15.88 (5/8)	15.88 (5/8)
Pipe I	Extension Len	gth N	1in ~ Max (m)	3~20	3~20	3~30	3~30	3~30	3~30	3~30
Pipe I	Length For Ad	ditional Gas	m	7.5	7.5	7.5	10	10	10	10
Additi	ional Gas Amo	unt	g/m	10	10	15	15	15	25	25
Power Supply			Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	
Opera	iting Range (0	utdoor) Cooling Heating	Degree °C	+5~46 -15~24	+5~46 -15~24	+5~46 -15~24	+5~46 - <mark>15~24</mark>	+5~46 -15~24	+5~46 -15~24	+5~46 -15~24
Refrig	jerant Type			R32	R32	R32	R32	R32	R32	R32

 $<sup>^{\</sup>circ 1}$  Sound pressure level specification is measured according to JIS C9612.

# SPECIFICATIONS & FEATURES

 $Products in this brochure contain R32\ refrigerant. Please\ refer to Panasonic's\ installation\ instructions\ and\ service\ manuals\ before\ installation\ and\ servicing\ this\ product.$ 

Only persons and/or companies qualified and experienced in the installation, service and repair of refrigerant products should be permitted to do so.

The purchaser must ensure that the person and/or company who is to install, service or repair this air conditioner has qualifications and experience in refrigerant products.

Suitable access for warranty and service is required.

 $Future\ improvement,\ specifications,\ designs\ of\ product\ and\ availability\ are\ subject\ to\ change\ without\ notice.\ Please\ check\ with\ your\ dealer.$ 

# ALL CAPACITY AND ENERGY EFFICIENCY RATINGS ARE BASED ON AS/NZS3823.2.

COOLING	Indoor temperature Outdoor temperature	27°C DB/19°C WB 35°C DB	
HEATING	Indoor temperature Outdoor temperature	20°C DB 7°C DB / 6°C WB	

# **FEATURES EXPLANATION**

# nanoe-G (STAND-ALONE AIR PURIFICATION SYSTEM)

nanoe-G works effectively on airborne particles including PM2.5, adhesive and in-filter micro-organisms such as bacteria, viruses and mould ensuring a cleaner living environment.



# ODOUR-REMOVING FUNCTION

With this function, there's no unpleasant odour when the unit starts up. That's because the fan remains off momentarily, while the source of the odour inside the air conditioner is suppressed.

The unit must be in cool or dry mode and the fan speed must be set to automati



# REMOVABLE, WASHABLE PANEL

Gives you easy access to the filter as well as making the unit easy to clean.



# COMFORT

Come home to ultra-fast cooling, and then enjoy continuous comfort Shower Cooling that evenly distributes cool air.



I Аито**У** 

Enjoy the comfort of running your air conditioner at night and still have a relaxing sleep.



# PERSONAL AIRFLOW CREATION

Vertical and horizontal airflow patterns can be combined as desired to achieve optimum comfort, with operation possible by remote control, even from a



# MILD DRY COOLING

Fine control helps prevent a rapid decrease in room humidity while maintaining the set temperature.



# FAN MODE

Allows you to run the fan without any cooling or heating, thus giving only ventilation.



# AUTO CHANGEOVER (INVERTER)

In Auto Mode the unit will select whether heating or cooling is required.



# POWERFUL MODE

Pressing the Powerful button cools or heats the room quickly. It provides fast comfort, with full power and a strong airflow. This is perfect for use immediately after coming home, or when unexpected guests arrive.



## SOFT DRY OPERATION MODE

Starts with cooling to dehumidify, then provides continuous breeze at a low frequency to keep a room dry without much change to the temperature.



# HOT START CONTROL

On the start of the heating cycle and after the defrost cycle, the indoor fan will start up when the indoor heat exchanger is warm.



# **ENERGY SAVINGS**

### **FCONAVI**

Sensors detect opportunities to reduce waste



### TEMPERATURE WAVE

Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.



### INVERTER CONTROL

Varies the rotation speed of the compressor for higher energy savings.



# CONVENIENCE

# 24-HOUR DUAL ON & OFF REAL SETTING TIMER

This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.



DRED

# 3RD PARTY CONNECTIVITY

Allows limited control from an external source



# WIRED REMOTE CONTROL (OPTIONAL)

For use in commercial applications, or where users don't want a remote control.



# DEMAND RESPONSE ENABLING DEVICE (DRED)

Allows Electrical Utility Companies to regulate the power supply to the units if connected.



when wired to do so.





# LCD WIRELESS REMOTE CONTROL

Easy control of the unit from anywhere in the room



# WI-FI READY (OPTIONAL)

Control and monitor your air conditioner anywhere, anytime. (CZ-TACG1 Wi-Fi Adapter is required).



# RELIABILITY

# BLUE FIN CONDENSER

Extra protection from the elements with a longer lasting coil.



# LONG PIPING

Long piping offers more flexible installation



# SELF-DIAGNOSTIC FUNCTION

Should a malfunction occur, the unit diagnoses the problem and shows the corresponding alphanumeric code. This allows for quicker



# RANDOM AUTO RESTART

When multiple units are connected and there is a power outage, they will turn on at different times in order to not spike the power supply.



# TOP-PANEL MAINTENANCE ACCESS

Easy access for maintenance.





# **OUTDOOR**







CU-725TKR CU-Z35TKR



CII-7/2TKR CU-Z50TKR CU-Z60TKR CU-Z71TKR



CII-780TKR

# PANASONIC SIZING WIZARD APP

Choose the right air conditioner easily



# FEATURES: Product Selector Model Recommendation Model Specifications Product Feature Videos Where to Buy



# **COMPATIBLE DEVICE AND BROWSERS:**

1. Android 4.4 or above

2. IOS 9.0 or above

This is not a definitive list of all compatible devices, other similar devices which use supported Operating Systems should also work via dedicated Apps. Please note that user experience may vary slightly depending on hardware and software combination.





# PANASONIC COMFORT CLOUD APP\*

Control your air conditioner anywhere, anytime



\*CZ-TACGA1 required

FEATURES:
Multiple Unit Control
Temperature Setting
Mode Setting
Energy Usage Analysis
Alert Notification



Input/Voltage	DC12V		
Power Consumption	Max 660mW		
Size (H x W x D)	66mm x 36mm x 12mm		
Weight	85g		
Interface	1 x Wireless LAN		
Wireless LAN Standard	IEEE 802.11 b/g/n		
Frequency Range	2.4GHz Band		
Encryption	WPA1-PSK (TKIP/AES)		

\*Functionality varies depending on models. Only available for TKR range.

CZ-TACG1 WI-FI ADAPTOR CONNECTION DIAGRAM: Optional Network Adaptor Only available for TKR range.





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

# Panasonic Australia Pty. Limited.

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**Panasonic** 

Air Conditioning

ACN 001 592 187 ABN 83 001 592 187

- Specifications are subject to change without prior notice for further improvement The contents of this catalogue are effective as of September 2018.
- Due to printing considerations, the actual colours may vary slightly from those shown All graphics are provided merely for the purpose of illustrating a point.