



Whole of Home

ADVANCE

Powerful performance with complete control.



That's better. That's Actron.



ActronAir

ActronAir. Because Australia needs Australian air conditioning.

ADVANCE

The year 1984 saw Advance Australia Fair become our National Anthem, the 1 dollar coin come into circulation and a small family air conditioning business open its doors. Today, ActronAir is a proud Australian company recognised for making world-class air conditioners. Well, it stands to reason. The team at ActronAir experience our harsh Australian conditions first hand, and our climate places demands on air conditioning not found in other parts of the world.

And that's why ActronAir's engineers have developed the most advanced air conditioning systems specifically for the unique and harsh Australian environment.

Made with a superior operating range of -15°C to 54°C, and a host of innovative features, ActronAir's Advance ducted system is engineered to withstand the hottest and coldest conditions Australia can throw at it. Where other air conditioners struggle and shut down, the Advance will be there for you when you need it most.




**More than
a quarter of a
million Aussies
take comfort in
ActronAir**

Unequalled performance and efficiencies through Tru-Inverter technology.

ActronAir's range of energy efficient air conditioners feature variable fan technology. Combined with Advance's world leading Tru-Inverter technology, it delivers the perfect amount of heating or cooling, right down to a fraction of a degree. It reaches your desired comfort level quickly and keeps it there with unequalled control.



A superior operating range made for Australia

Most overseas air conditioners are only designed with a maximum temperature range of 43°C to 46°C. The made-in-Australia for Australia Advance operates up to 54°C. Big deal? Yes.

The temperature around the outdoor unit can reach far higher than what they're saying on the weather report due to direct sun or heat radiating off the ground. They're often located against a wall or fence where there's low air circulation.

Advance not only operates at higher temperatures, it also performs at a higher capacity leading up to that peak temperature.



“ Nothing beats performing under extremes. Engineered for Australia, you can trust ActronAir to be there when you need it most. ”

Mark 'Frosty' Winterbottom
V8 Supercars Champion & ActronAir Brand Ambassador

Smarter outside



Vertical discharge

Advance's clever outdoor unit features a vertical, rather than horizontal, discharge of air. Unlike foreign brands, we're well aware that the side of the Australian home is not only a handy space for an outdoor unit, but is also often tight. And we know if you don't let hot air escape it will surround the unit, reducing its performance and in turn lead to higher energy consumption. That's why we've engineered the Advance to release hot air upwards, rather than pushing air straight into the neighbour's fence.

Aussie tough



Louvered grille

The Advance range is engineered using only the very best quality components. With its unique powder coated louvered grille guard, it ensures better airflow and protection against Australia's toughest conditions.

Here for the long haul



Coated coil protection

ActronAir uses Hydrophilic Blue Fin Coil Coat Protection on the indoor and outdoor coils of Advance. It reduces corrosion from the harsh Australian conditions, as well as assisting the defrosting process, thus improving heating efficiency.



Turn on, bliss out



A smarter start-up

In winter, some air conditioners when turned on blast out unheated air until the indoor heating coil catches up. ActronAir engineers developed a better way. Advance has a smart preheat delay function so that the coil heats up before the fan comes on. That's better - simple and smart.

Pick up where you left off



Auto-restart

Blackout? No problem. Our Advance restarts automatically in its last programmed setting once the power is restored, which means you don't have to take the time to reprogram your system.

Ready for up to 8 zones



Integrated zone card

All Advance series indoor units come with integrated zoning ready for up to 8 zones.

Maintain perfect temperatures



Additional sensing points

The Advance can support up to 3 remote sensors, each of which can be assigned to a zone to provide better temperature control for better comfort.

Better Zoning = Energy Efficiency and Comfort

What's zoning and why do I need it?

Zoning is a pretty straight forward idea. You simply divide your home into smaller areas that can then be conditioned individually, letting you turn them on and off to suit you, which provides better comfort and greater energy efficiency. Think of lights in a home - when you leave a room you turn off the light to save electricity, right? Well, zoning allows you to do the same with your air conditioning.

Sounds simple but as always the devil is in the detail.

A lot of brands will claim that their method of zoning is best, but in truth no-one can zone like ActronAir can. Only our systems can zone all the way down to a single room*, thanks to our unique Energy Smart Zoning™ technology.

*True of the vast majority of rooms, unless the selected room is especially small.



Energy Smart Zoning

Variable Fan Technology

The problem with other brands is that even when you turn individual zones off, their systems often keep generating more airflow than you need. That's because they can't ramp down their indoor fan speed low enough to only deliver the air that's required - typically they are only able to get down to 60% at best.

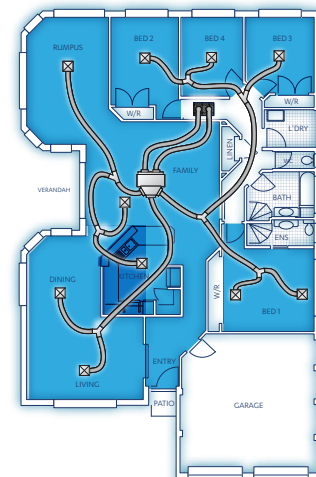
And unfortunately this excess air needs to go somewhere, typically being sent to the zones that are on, which can result in an 'air dump' effect that is noisy, leaves you uncomfortable, and forces you to pay to condition air you don't even want.

Well, thanks to Variable Fan Technology™, the Advance series can ramp its indoor fan speed down as low as 20%*, allowing it to deliver just the right amount of conditioned air - no more dump zones, no more soaring power bills.

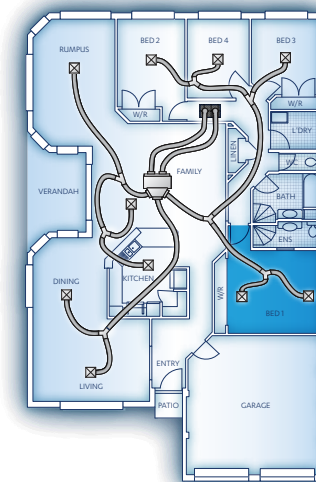
Tru-Inverter Compressor

For the best comfort and efficiency, it also matters how well your outdoor unit can match its compressor speed to its indoor fan speed, to ensure it delivers you the perfect amount of comfort. Thanks to superior Tru-Inverter technology the Advance can run its compressor all the way down to 20% of capacity, unlike most other brands which typically can only get to 40% at best.

*Performance claims achieved using integrated ActronAir zone barrels, performance may vary when using third party zone barrels.



Now you can condition your whole home...

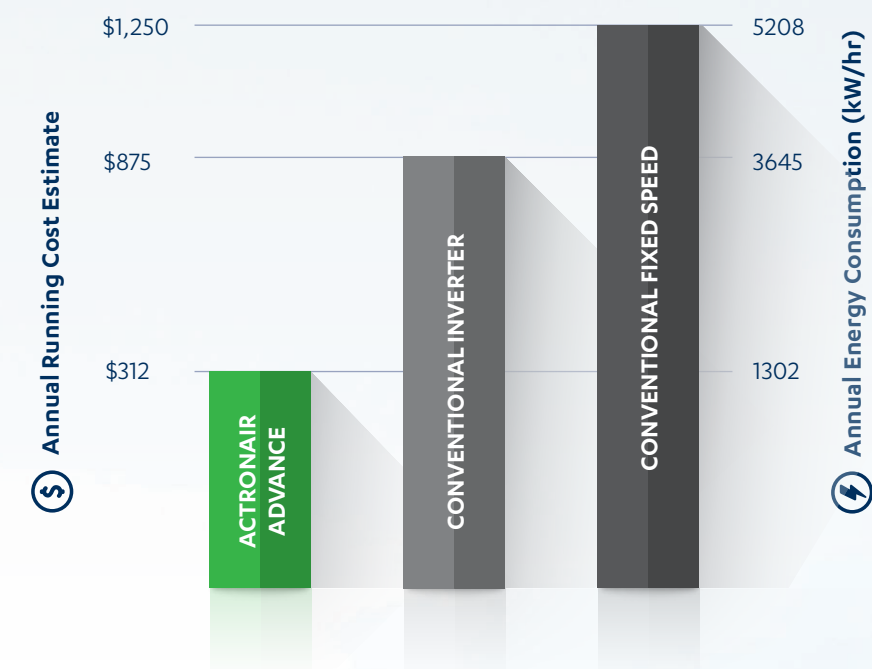


...or just the zones you want, all the way down to a single room.



Energy Modelling

Typical 14kW Unit - Cooling Only



Based on electricity price of 24c per kW/H and the cooling energy consumption, this translates to a saving of up to \$900 per annum compared to conventional fixed speed systems.



Savings that pay for themselves

The energy saving features in an Advance system can make a huge difference. Over 5 years you could **save up to \$4,500** on your electricity costs for cooling alone, compared with other air conditioning technology. When heating is taken into consideration that could be even more.

In fact, Advance's Tru-Inverter technology is **up to 75% more efficient** than conventional fixed speed air conditioners, and **50% more efficient** than a conventional inverter system.



What's Inverter and what's Tru-Inverter?

An inverter controls the speed of an air conditioner's motor, allowing the temperature to be continuously regulated. Before inverters, air conditioners were either on or off – there was no in-between. Conventional inverters use 'step, rest and stop' cycles, so the temperature 'jumps' up and down to each step. Because of that, they use more power as they work harder to reach the desired level.

Tru-Inverter was first introduced to the air conditioning industry by ActronAir and the name says it all. A vastly more precise inverter technology, it gets to the desired temperature faster, smoother and maintains it to within $\pm 0.3^{\circ}\text{C}$ at the sensor location. That means more comfort and a more comfortable electricity bill.

It's **Tru** - the best **Inverter** on the market.



Why 'capacity' can be an air 'con' job

When considering an air conditioner's capacity, it's really important to understand what is being referred to. When an air conditioner claims a specific size, for example 16kW, what they're really referring to is their 'rated capacity', which is the amount of heating or cooling they can provide when measured at a specific temperature set point.

However, the funny thing with air conditioners is that when it's really hot or cold outside, they actually perform far worse, only being able to deliver less heating or cooling than their rated capacity would have you believe. When you think about how hot Australia can get in summer, or how cool our southern states can get in winter, you can see why it's important that your system doesn't just perform well at it's rated capacity, but also comes with the ability to deliver powerful performance in extreme temperatures. That's where TruMax comes in.

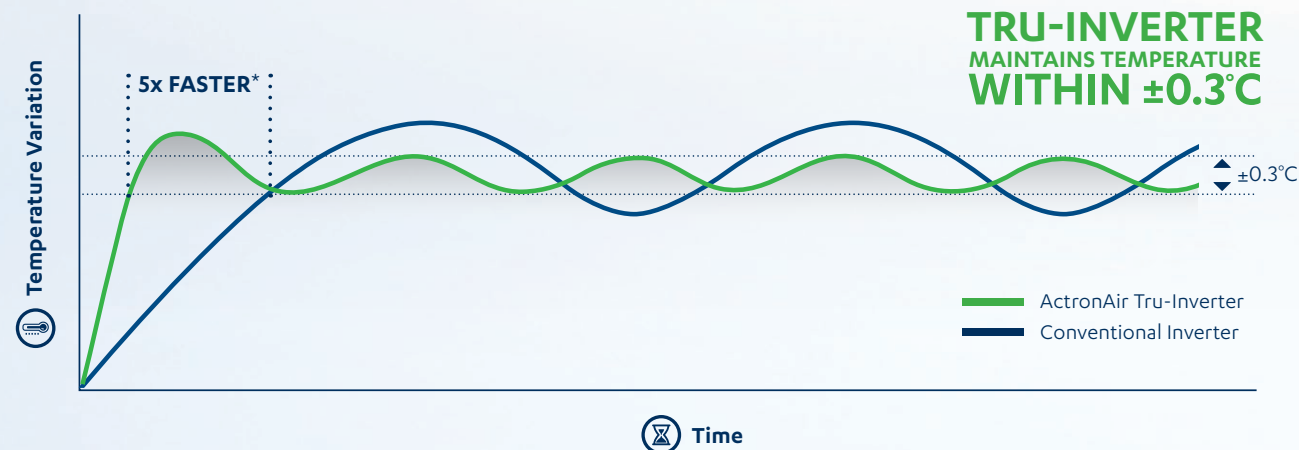
When the temperature outside soars or plummets, the Advance's TruMax functionality allows it to continue performing at higher capacities than other brands, meaning it can be counted on to provide powerful cooling or heating when it's needed most. Other brands may claim they have a high capacity, however in reality when the temperature hits extreme highs the actual performance they can provide is dramatically lower than what you may think. And that's not a good recipe for staying comfortable when it's scorching hot or freezing cold outside.

Stopping the start-stop, start-stop

When you've been out and about on a scorching hot day, it's nice to come home to cool comfort. Thanks to ActronAir's Tru-Inverter technology, Advance can get up to maximum capacity a phenomenal five times faster than conventional 'step and rest' inverter systems, which means it can get to heating and cooling your space faster.



TRU-INVERTER
MAINTAINS TEMPERATURE
WITHIN $\pm 0.3^{\circ}\text{C}$



*Subject to room size and conditions.

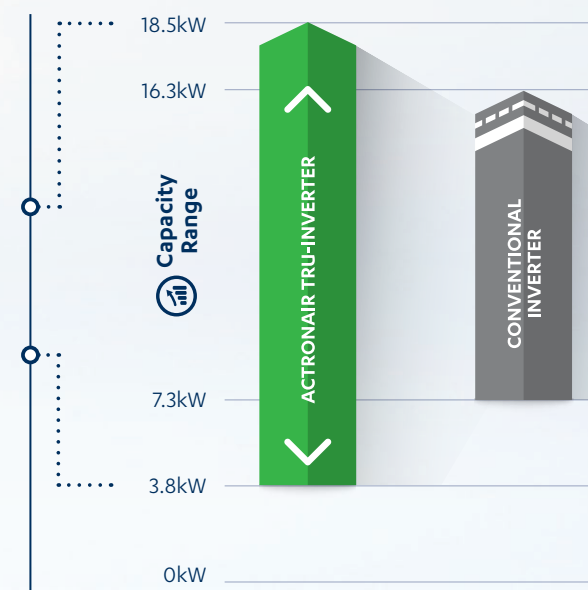
Tru-Inverter vs Conventional Inverters

TRU-INVERTER HAS A WIDER CAPACITY RANGE VS CONVENTIONAL INVERTERS

TruMax technology allows for powerful heating and cooling in extreme temperatures, right when you need it most

Tru-Inverter can operate down to 20% capacity for improved comfort and efficiency

Example of ActronAir
Advance CRV180S/EVV180S
vs. Conventional Inverter.



CONVENTIONAL INVERTER CONVENTIONAL PERFORMANCE

Conventional Inverters can only operate at maximum capacity temporarily

Most conventional inverters can only operate down to 40% capacity

The best analogue control on the market

Available in your choice of grey or white and featuring an attractive and easy to use design, the L Series comes packed with features such as NFC and integrated zoning. Finally, we believe the best results come when the controller and the air conditioner are designed with each other in mind - that approach is why the L Series operates seamlessly on the Advance series to provide optimum control and performance.



130 mm width



130 mm height

Controller shown at actual size

Integrated zoning



8 zones under your control

An 8-zone touch pad is conveniently integrated into the master controller, removing the need for you to install a stand alone zoning control on your wall.

Clean and simple design



Easy on the eye, easy to understand

The L Series features an attractive design that is logical and user-friendly, with controls in easy to read 'plain English'.

No manual? No problem



Near Field Communication (NFC)

The master controller comes with NFC included as standard, providing quick and easy access to operating instructions.

Designed to suit you



Your choice of colour

The L Series is available in your choice of grey or white, allowing you to choose the colour that suits your home best.

Program your comfort



Advanced features made easy

The L Series offers advanced scheduling functions, including a 7 day 24 hour programmable timer, that makes managing your comfort completely 'set and forget'.

Precise temperature control



Choose your custom comfort

Now you can set your desired temperature in 0.5°C degree increments, allowing you to pick the temperature that suits you best.



Make a smart connection to comfort

The Advance also has the ability to operate with a bridging platform that, when used in conjunction with an ActronAir BMS card, can assist in integrating with over 40 home automation systems, including:



NEO

Better Control Upgrades

Compatible with our Advance and Classic series 2 ducted systems, NEO is ActronAir's latest entry in a line of award winning control products. Building on the unique design and superior performance that ActronAir controls are known for, NEO brings the best in premium control technology to more people than ever before.

The best design. The best usability. The best included features. The best mobile control. It truly is control in style.



Physical Dimensions (mm)
118mm x 212mm x 17mm (HxWxD)
Weight (grams)
450gm (360gm without mounting bracket)
Build Materials
Toughened Glass Front, ABS Plastics Back



212 mm width

Controller shown at actual size



118 mm height

- 1 Your choice of colour**
Available in Jet Black or Ceramic White, to suit every taste.
- 2 LED Wall Glow**
Attractive colour coded LED wall glow let's you know when your system's on and what mode it's in.
- 3 Custom, easy to use design**
Designed by ActronAir from the ground up, the elegantly simple and intuitive User Interface makes navigation a breeze.
- 4 Integrated Zoning**
No need for clunky bolt-on zoning modules - NEO comes with zoning integrated as standard, allowing you to control all of your zones from the NEO Touch Controller. Best of all, each zone can be easily updated with a custom name that suits you best.
- 5 Near Field Communication (NFC)**
NEO comes with NFC included as standard, providing quick and easy access to operating instructions.
- 6 Precise comfort control**
Now you can set your desired temperature in 0.5°C degree increments, allowing you to pick the temperature that suits you best.
- 7 Program your comfort**
NEO offers a 7 day 24 hour programmable timer, that makes managing your comfort completely 'set and forget'.



Come home to comfort with NEO Connect

The all new NEO Connect app has been developed to ensure the ease of use and functionality in NEO carries across to the NEO Connect application. Included as standard, the NEO Connect app allows you to connect with comfort from mobile or tablet from virtually anywhere in the world.



Free NEO Connect
Mobile App available on



Better Sound

ADVANCE

Like any machine, when they're in use air conditioners are always going to make noise. And if the air conditioner hasn't been designed or built with this in mind, the noise they make can cause real headaches for you and your neighbours.

We believe in doing what we can to keep you comfortable inside and outside your home, which is why the Advance comes with Sound Reduction System (SRS) technology, designed to keep noise to a minimum wherever possible.

Quiet Mode

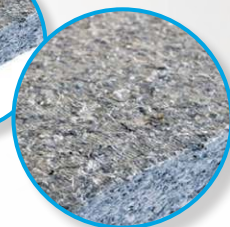
When operational you can select Quiet Mode which limits the noise output from the compressor and fans.

Quiet Start-up

The Advance features intelligent software with enhanced start-up logic, which reduces mechanical and vibration noise when the system is first turned on.

Compressor jacket

The Advance comes with a compressor jacket fitted as standard, which helps to muffle the compressor's noise.



High performance acoustic cotton sound insulation absorbs vibration from the compressor

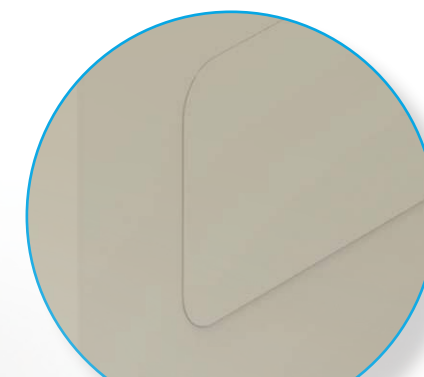
Quiet Operation

The Advance series features a three speed outdoor fan, allowing for smoother, quieter operation.



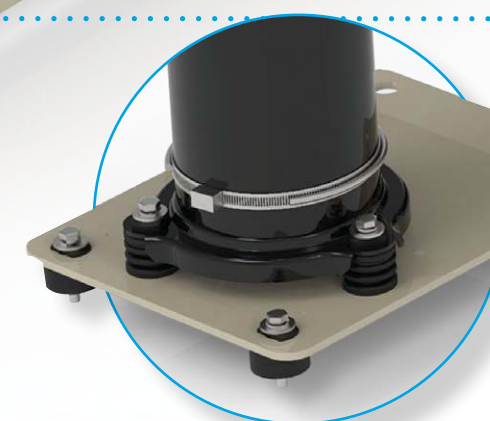
Ribbed paneling

Unique, stiffened design reduces vibration transfer throughout the cabinet.



Minimised movement

Dual vibration absorption rubbers and compressor plate work together to enhance vibration absorption, which minimises noise transfer to the base.



Technical Specifications

Advance System (12.20-21.55kW)

Technical Information								
OUTDOOR MODEL		CRV140S	CRV160S	CRV180S	CRV160T	CRV180T	CRV210T	CRV240T
INDOOR MODEL		EVV140S	EVV160S	EVV180S	EVV160S	EVV180S	EVV210S	EVV240S
¹ Total (Gross) Capacity (kW) (AS/NZS3823.1.2)	Cooling (Rated)	12.20	14.25	16.30	14.25	16.30	19.40	21.55
	Heating (Rated)	12.80	14.75	16.70	14.75	16.70	19.60	22.50
Nett (Rated) Capacity (kW) (AS/NZS3823.1.2)	Cooling (Min/Rated/ TRU MAX)	2.65 / 12.00 / 14.00	3.50 / 14.00 / 16.00	3.70 / 16.00 / 18.00	2.50 / 14.00 / 16.00	3.75 / 16.00 / 18.00	5.20 / 19.00 / 21.00	5.20 / 21.00 / 24.00
	Heating (Min/Rated/ TRU MAX)	2.50 / 13.00 / 15.00	3.20 / 15.00 / 17.00	3.90 / 17.00 / 18.95	2.50 / 15.00 / 17.00	3.85 / 17.00 / 19.00	4.60 / 20.00 / 23.00	5.00 / 23.00 / 25.00
Input Power (kW) (AS/NZS3823.1.2)	Cooling (Rated)	3.63	4.29	4.93	4.24	4.86	5.70	6.10
	Heating (Rated)	3.97	4.22	4.99	4.39	4.91	5.50	6.57
² EER Rated (AS/NZS3823.1.2)	Cooling (Rated)	3.31	3.26	3.25	3.30	3.29	3.33	3.44
³ COP Rated (AS/NZS3823.1.2)	Heating (Rated)	3.27	3.55	3.41	3.42	3.46	3.64	3.50
Power Supply (V / Ph / Hz)	Outdoor	230V / 1Ph + N / 50Hz			400V / 3Ph + N / 50Hz			
	Indoor	230V / 1Ph + N / 50Hz			230V / 1Ph + N / 50Hz			
Rated Load Amps (AS/NZS3823.1.2)	Outdoor / Indoor / Total	15.2 / 1.6 / 16.8	17.7 / 2.2 / 19.9	20.2 / 2.7 / 22.9	6.0 / 2.2 / 8.2	7.8 / 2.7 / 10.5	7.8 / 3.6 / 11.4	8.4 / 3.8 / 12.2
Full Load Amps (AS/NZS3823.1.2)	Outdoor / Indoor / Total	21.2 / 2.4 / 23.6	24.6 / 3.0 / 27.6	27.1 / 3.8 / 30.9	11.9 / 3.2 / 15.1	11.8 / 4.4 / 16.2	16.4 / 5.5 / 21.9	16.6 / 6.0 / 22.6
⁴ Circuit Breaker Amps		25.0	32.0	32.0	20.0	20.0	25.0	25.0
IP Rating	Outdoor	IP44						
	Indoor	IP20						
Compressor	Type / No. per Unit	Tru-Inverter Variable Speed Scroll / 1						
	Starting Method	Inbuilt Soft Starting						
No. Refrigeration Circuits/No. Capacity Stages (Capacity range)		1 / Variable Capacity (20-100%)						
Refrigerant		R410A						
Fans (Type x Number per unit)	Outdoor	Axial / 6 Pole External Rotor / Direct Drive x 2						
	Indoor	Twin Deck Centrifugal / ECM Direct Drive x 1						
Airflow Range Indoor (l/s)	Maximum	760	900	1020	900	1020	1230	1360
	Nominal	630	750	850	750	850	1020	1130
	Minimum ⁵	220	250	300	250	300	350	400
Outdoor Dimensions (mm)	Depth	580	580				685	
	Height	985	1045				1105	
	Width	1460	1460				1685	
Indoor Dimensions (mm)	Depth	615		680	615	680	695	
	Height	412		435	412	435	485	
	Width	1290		1420	1290	1420	1470	
⁶ Nominal Weight (kgs)	Outdoor	131	144	152	150	155	200	209
	Indoor	53	56	69	56	69	75	78
⁶ Sound Pressure Level (dBA)	Outdoor (low/high fan)	40.2 / 45.0 / 50.9	48.7 / 49.1 / 52.8		47.1 / 48.3 / 52.1		41.9 / 46.3 / 60.0	44.3 / 46.9 / 60.0
⁷ Sound Power Level (dBA)	Outdoor (low/high fan)	58.5 / 64.3 / 69.7	65.8 / 67.0 / 71.0		66.3 / 67.8 / 71.5		61.3 / 65.7 / 79.6	63.7 / 65.8 / 79.6
MEPS Compliant		Yes	Yes	Yes	Yes	Yes	Yes	Yes
⁸ Demand Response Capability (AS4755.3)		Capable	Capable	Capable	Capable	Capable	Capable	Capable

Foot Notes 1-9

- Based on unit rating excluding indoor fan kW.
- EER Rated = Energy Efficiency Ratio (Rated Capacity Cooling / Rated Input Cooling).
- COP Rated = Coefficient of Performance (Rated Capacity Heating / Rated Input Heating).
- Refer to AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.
- Refer to Catalogue Unit Weight Distribution Guide section for details of weight points.
- Sound Pressure Level at 3m distance is determined as the measured sound pressure at 3m perpendicular to the coil side of the condenser. Sound levels are determined in an anechoic chamber and may differ once the unit is installed due to ambient conditions.
- Measured based on ISO 3743-1, Determination of Sound Power Levels and Sound Energy Levels of Noise Sources Using Sound Pressure.
- When Demand Response capability option is chosen, the air conditioner will be fully compliant with AS4755.3 in the following modes: DRM 1, 2, 3.
- Achieved when operating on Variable Fan Mode.

Important Notes:

- The Local Electricity Supply Authority may require limits on - starting current, running current and voltage drop, please check prior to purchase.
- When the outdoor temperature exceeds the rated conditions, the cooling/heating capacities may decrease the rated nett values.
- Specifications subject to change without notice.
- All pictures shown are for illustration purpose only.

Rated Conditions:

Cooling: 35°C DB Outdoor / Air Entering Indoor 27°C DB, 19°C WB
Heating: 7°C DB, 6°C WB Outdoor / Air Entering Indoor 20°C DB

Warranty:

For full terms and conditions of ActronAir warranty, please refer to warranty terms document - www.actronair.com.au

Controller Specifications

Control Options	
L Series Wall Controller - LR7-1W (White) or LR7-1G (Grey)	Up to 3
NEO Touch Wall Controller - NTW-1000 (White) or NTB-1000 (Black)	Up to 2
Remote Sensors	Up to 3
BMS and Home Automation Compatibility (ICUNO-MOD)	Optional

L Series

Specifications	
Compatible with ActronAir Series	Advance Series, Classic Series 2
Screen	Enhanced LED backlight, segment display
Temperature Sensor	Yes
Dimensions (mm)	130mm x 130mm x 14.4mm (HxWxD)

NEO Touch Wall Controller

Specifications	
Compatible with ActronAir Models	Advance Series, Classic Series 2, Variable Capacity Commercial
Screen	7" Touchscreen, 1024x600, IPS - Wide viewing angle, enhanced backlight
Wi-Fi compatibility	802.11 b/g/n 2.4 GHz
Temperature Sensor	Yes
Humidity Sensor	Yes
Proximity/Light Sensor	Yes
Dimensions (mm)	118mm x 212mm x 17mm (HxWxD)

NEO Connect Mobile App

Specifications	
Compatible with ActronAir Models	NTW-1000, NTB-1000
Platform	iOS and Android
OS Requirements	iOS 9 or later – Android Version 6 Marshmallow or later
Connection Requirements	Wi-Fi or Mobile Data with Internet access





ActronAir

That's better. That's Actron.

actronair.com.au

1300 522 722



Designed and built
in Australia