



Greenenergy Advanced Multi-Split Systems

Creating a more comfortable and energy efficient home for you



Greenenergy. Made for ultimate comfort.



You ask if an air conditioning system be both green and yet provide the highest level of comfort and silent operation. We heard you. Now Greenenergy by Trane offers the best of both worlds – it is the new green with true energy savings, yet the most energy efficient and quietest air conditioning system.

Trane Greenenergy is a new generation DC (direct current) inverter home central air conditioning system.

Adopting latest innovation and cutting-edge technology, Greenenergy can be installed across a wide spectrum of home types. From high end apartments to luxury villas, the elegant and slim Greenenergy design is the perfect fit anywhere, any room.

With Greenenergy, you are assured of a system that is highly reliable and supported by Trane's international after sales network, giving you peace of mind, while helping you save time, energy and cost. Moreover, with the green refrigerant (R410A), you are doing your bit for the environment too.

Homeowners usually face a dilemma when their air conditioning systems are unable to meet the standards for high efficiency, comfort and low noise levels. Choose wisely and you can enjoy the ultimate cooling experience – everyday – for many years to come.





*Greenenergy - the perfect fit
anywhere, any room.*



Apart from luxurious villas and premium condominiums, Greenenergy is also suitable for retail and specialist stores as well as prestigious club facilities

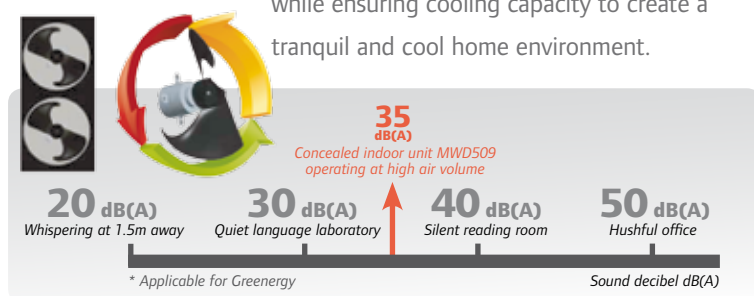
We care about every aspect of your home comfort.

The Greenery is designed to provide superior comfort and a healthy living environment. You just have to experience it for yourselves to enjoy the amazing features:

- the lowest indoor unit sound level
- improved acoustic performance of the outdoor unit
- precise temperature control
- enhanced humidity management

Whisper-quiet operating environment

Condensing fans and inlet cone structure of outdoor units are optimized to reduce noise level. The concealed indoor unit is also redesigned to keep fan speed as low as possible while ensuring cooling capacity to create a tranquil and cool home environment.



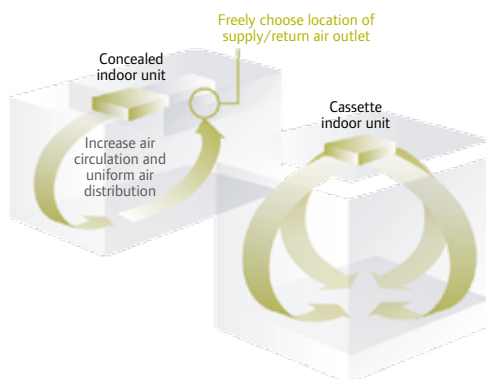
Humidity control



The dehumidification function ensures that you will never be stuck in a sticky and wet environment – literally.

Comfortable air distribution

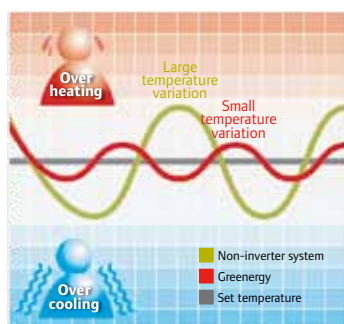
By offering flexibility in the location of the supply/return outlets of the concealed unit, this helps homeowners avoid air circuit and increase air circulation. On top of that, the Cassette indoor unit has a four-way wide vertical air distribution. Such design functions ensure optimal comfort for you.



Precise temperature control

Using electronic expansion valves, the unit can automatically adjust and rationally allocate

refrigerant flow to keep the system at optimal status. The DC inverter compressor utilizes 180° Sine Wave Technology to perfectly control the frequency of ON/OFF mode. This combination seamlessly keeps the indoor temperature at a remarkable $\pm 0.5^{\circ}\text{C}$ of the set temperature.



Rapid cooling

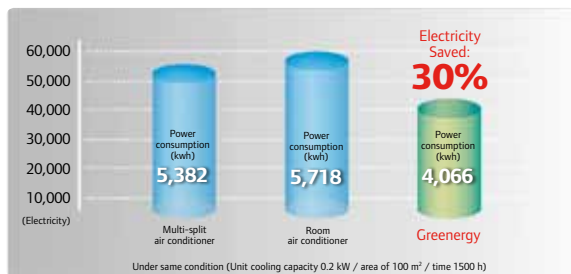


The rapid cooling function enables the unit to operate under high frequency so that the cooling capacity increases 20% instantaneously to reach the set room temperature sooner.

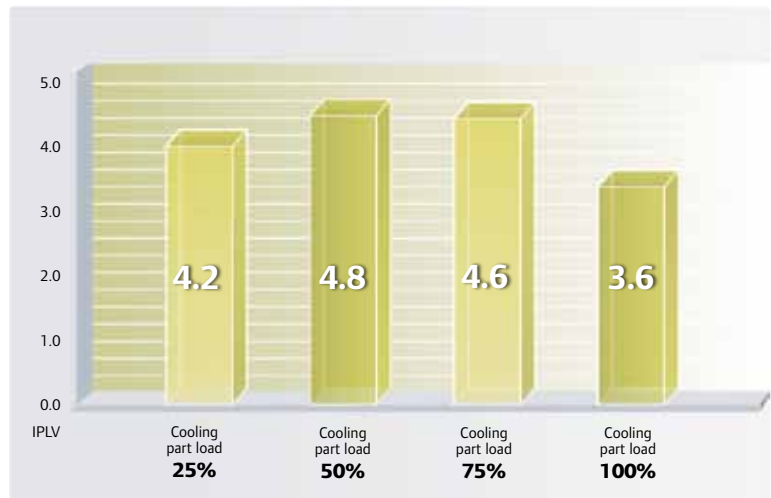
Making your home more energy efficient... and less energy means a smaller carbon footprint and greener living

When you choose Greenergy, you not only choose a system that offers you superior comfort but also an environmentally sustainable lifestyle. With Greenergy, you live green and contribute to reducing your carbon emissions to make the world a more sustainable living environment.

With market leading efficiency, Greenergy also offers significant savings in electricity costs.



Taking a 100 m² room with cooling capacity of 0.2 kW per square meter and electricity cost at USD0.144 per kW as an example, the energy consumption of Greenergy is significantly lower by up to 30% compared with conventional multi-split and room air conditioners.



High IPLV

DC inverter compressors feature high IPLV. Since most air conditioning systems work under part load of 50% to 75%, the higher the IPLV is, the more energy efficient the system is.

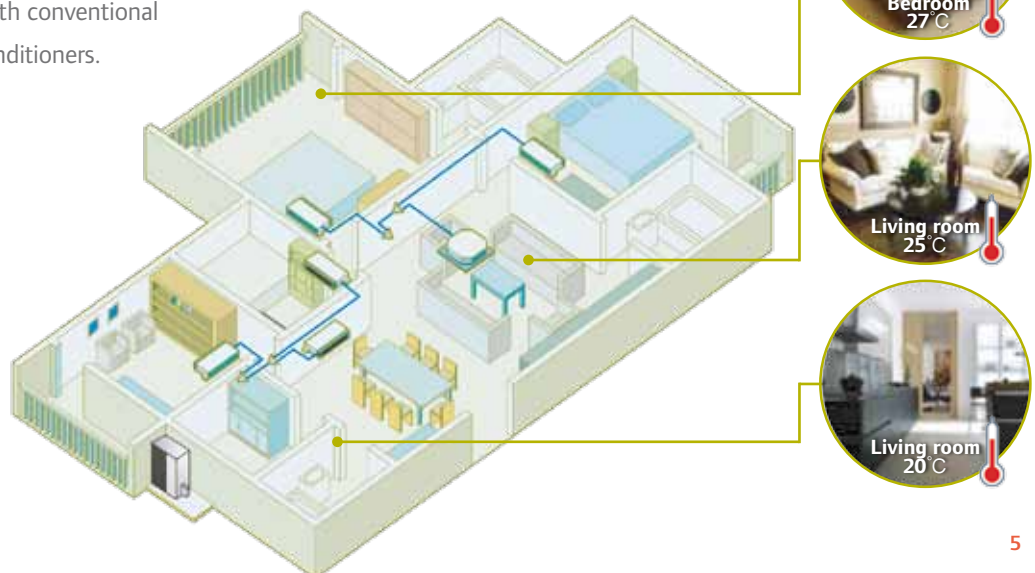
Green R410A refrigerant

Unlike R22 which is used in most air conditioning systems, Greenergy uses the R410A refrigerant that is more energy efficient with zero ozone depletion potential (ODP) and is more environmentally sustainable.



Individual room/zone control

Each room can be controlled independently. Different room temperatures can be set to satisfy different comfort needs to reduce waste.



Greenenergy.

A system you can trust.



Greenenergy is a highly reliable system that brings you continuous comfort and peace of mind.

Energy efficiency and quiet operation are powerful attributes but they are worthless without reliability – what's the point of having innovative technology if it breaks down all the time?

Greenenergy is designed by the Trane Global Design Center which brings together a group of top industry engineers to contribute an abundance of collective knowledge to design the most reliable products.

Quality Production.

Greenenergy is tested under stringent and realistic conditions (2,000 hours of continuous system running test) and further verified through a third-party test conducted by China Hefei General Machinery Research Institute, a multi-discipline and comprehensive national Class A scientific research institute under direct jurisdiction of China National Machinery Industry Corporation, to ensure long lasting and hassle-free operation for end users.

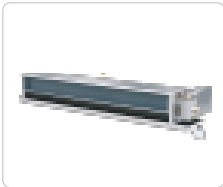
Greenenergy is manufactured at Trane's flagship manufacturing site in Asia Pacific Region, which is an environmentally friendly and comprehensive integrated world-class facility. It is ISO 14000 and OHSAS 18000 certified and also LEED™ (Leadership in Energy and Environmental Design) gold certified from the United States Green Building Council (USGBC).



Greenenergy not only supports the China domestic market but also the Asia Pacific markets.

Types of indoor units

Concealed



Cassette



High wall



Strength of Trane design.

Need to free up space in your home?

Not enough room for the outdoor unit?

Is the distance too far from the indoor to the outdoor unit?

Does the indoor unit conflict with the interior design style?

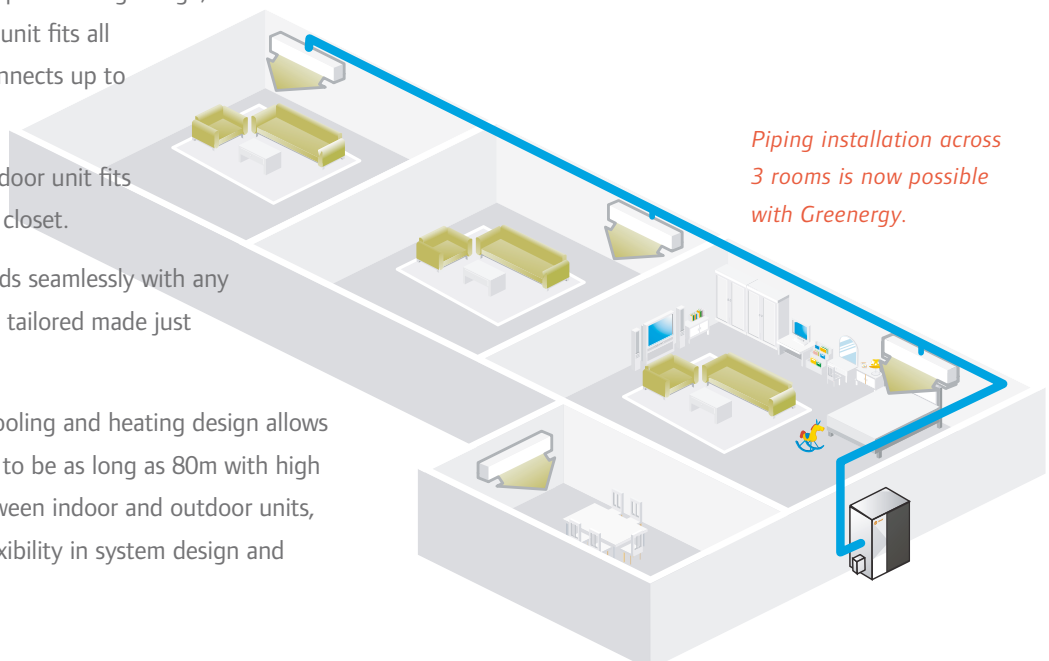
For these concerns and more, our engineers have developed the ideal package to meet all your needs:

Greenery comes in three types of indoor units - concealed, cassette and high wall.

You can choose any unit type to fit the different interior style and room usage, be it a contemporary living area, a retro master bedroom or a Victorian dining room.

Excellence in the smallest details:

- With Trane's brilliant space-saving design, the compact outdoor unit fits all balcony space and connects up to eight indoor units.
- The slim concealed indoor unit fits easily into any ceiling closet.
- The sleek design blends seamlessly with any interior styles as if it's tailored made just for your home.
- The optimized over cooling and heating design allows the refrigerant piping to be as long as 80m with high elevation change between indoor and outdoor units, giving you greater flexibility in system design and piping installation.



Piping installation across 3 rooms is now possible with Greenery.

Zero unscheduled breakdown

\$14 billion global business, 5000 certified engineers, 2000 hours of system test, 1652 kwh electricity savings, 35 dB(A) sound level, 3 indoor unit options, 1 brilliant system.



The driving force behind our energy ingenuity is the people who work for Trane.

Our diverse team of professionals gives the company expertise in residential solutions that few companies can match. Trane has more than 5,000 degreed engineers in our global sales force and the Asia team is growing increasingly rapid.

Trane has a strong dealer network in various countries in Asia region. They respond quickly to your questions and work closely with you on the home air conditioning solution.

Wondering how you can improve your home comfort and efficiency? Ask Trane.

Find out how Trane can take your home into the next generation of comfort and energy performance with reliable technology and professional support.

Contact your local Trane representative.



System Overview

Greenery in detail:

1. Concealed unit

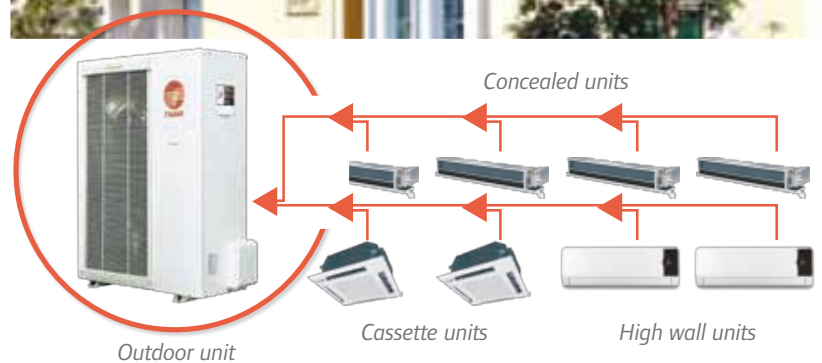
- Compact design requires smaller installation space but provides better invisibility
- Blue fin features better corrosion resistance and better heat transfer
- Low sound level design ensures whisper-quiet operation
- Well insulated one-piece mold drain pan prevents water leakage
- Compatible with wired or wireless control

2. Cassette unit

- 4-way directional airflow brings wide vertical air distribution
- Wireless and wired remote controller available
- High lift condensing pump makes the drainage configuration a lot easier
- Space saving and free interior design
- Quiet operation
- Ease of installation
- Fresh air can be brought in

3. High wall unit

- Modern and compact design
- Removable and washable air outlet design makes air outlet and filter cleaning easier
- Multi and wide angle airflow design to meet different needs
- Quiet operation
- Ease of installation



4. Outdoor unit

- High efficiency unit with reliable aluminum fin
- Compact unit size allows for installation in limited or confined spaces
- Durable structure and serviceability
- New propeller design contributes to higher airflow and low noise
- Superior part-load performance
- Environment friendly refrigerant R410A reduces greenhouse effect with zero ODP
- Stainless casing

Technical data

Outdoor unit

Outdoor Unit Model		TUM524	TUM536	TUM542	TUM548
Power Supply	V/Hz/Ph	220 - 240V/50/1			
Rated Cooling Capacity	kW	8.5	10.0	12.5	15.0
Outdoor Unit Input Power	Cooling (kW)	2.5	3.2	4.0	5.1
Current	Running (A)	11.4	14.5	18.6	23.0
	Starting (A)	Soft Starting			
Compressor	Type	Hermetic DC Inverter			
	Number	1			
Fan Motor (axis style)	Number	1	1	2	2
Refrigerant	Type	R410a			
	Charge (kg)	3.15	3.15	4.2	4.2
Pipe Connection	Gas (inch)	5/8	5/8	3/4	3/4
	Liquid (inch)	3/8			
Unit Dimensions	Height (mm)	950			
	Depth (mm)	390			
	Width (mm)	980	980	1285	1285
Sound Pressure Levels	dB(A)	62	62	60	60
Unit Weight	kg	95	95	140	140

Note: 1. Cooling operating condition: outdoor dry bulb is 35°C.
2. Noise test complies with Standard GB/T 18837-2002.

Indoor: concealed unit

Indoor Unit Model			MCD509	MCD512	MCD518	MCD524
Cooling Capacity		kW	2.5	3.5	5.0	6.5
Power Supply		V/Hz/Ph	220 - 240V/50/1			
Fan Motor	Nominal Airflow (High/Medium/Low)	CMH	550/468/385	660/561/462	880/748/616	1200/1020/840
	External Static Pressure (Adjustable)	Pa	10~20	10~20	10~30	10~30
	Power	W	50	55	85	122
	Current	A	0.23	0.25	0.39	0.55
Sound Pressure Levels	(High/Medium/Low)	dB(A)	35/33/32	36/35/34	37/35/32	40/38/35
Pipe Connection	Gas	inch	3/8	1/2	5/8	5/8
	Liquid	inch	1/4	1/4	3/8	3/8
	Drain	inch	3/4			
Dimensions	(WxDxH)	mm	883*518*237	983*518*237	1153*518*237	1433*518*237
Duct Connection Size		mm	693*152	793*152	963*152	1243*152
Unit Weight		kg	19	20	23	30

Note: 1. Cooling operating condition: indoor: dry bulb is 27°C, wet bulb is 19°C; Outdoor: dry bulb is 35°C.
2. Noise test complies with Standard GB/T 18837-2002.
3. Nominal airflow is measured when fan runs at high speed and outdoor unit remaining pressure is 0Pa.

Indoor: high wall unit

Indoor Unit Model			MCW509	MCW512	MCW518
Cooling Capacity		kW	2.8	3.6	5.0
Power Supply		V/Hz/Ph	220 - 240V/50/1		
Fan Motor	Nominal Airflow (High/Medium/Low)	CMH	500/400/300	630/530/430	630/530/430
	Power	W	50	60	60
	Current	A	0.23	0.27	0.27
Sound Pressure Levels	(High/Medium/Low)	dB(A)	37/36/34	43/41/38	43/41/38
Pipe Connection	Gas	inch	1/4		
	Liquid	inch	3/8	1/2	1/2
	Drain	inch	1 1/8		
Dimensions	(WxDxH)	mm	843*180*275	940*200*298	940*200*298
Unit Weight		kg	11	13	13

Indoor: cassette unit

Indoor Unit Model			MCC518	MCC524
Cooling Capacity		kW	5.0	7.1
Power Supply		V/Hz/Ph	220 - 240V/50/1	
Fan Motor	Nominal Airflow (High/Medium/Low)	CMH	680/625/570	1180/1080/980
	Power	W	65	83
	Current	A	0.28	0.37
Sound Pressure Levels	(High/Medium/Low)	dB(A)	37/35/33	39/37/35
Pipe Connection	Gas	inch	1/2	5/8
	Liquid	inch	1/4	3/8
	Drain	inch	1 1/4	
Dimensions	Case (WxDxH)	mm	840*840*190	840*840*240
	Panel (WxDxH)	mm	950*950*60	
Unit Weight		kg	25	30
Panel Weight		kg	6.5	

Note: 1. Cooling operating condition: Indoor: dry bulb is 27°C, wet bulb is 19°C; Outdoor: dry bulb is 35°C.
 2. Noise test complies with Standard GB/T 18837-2002.



Ingersoll Rand (NYSE:IR) is a world leader in creating and sustaining safe, comfortable and efficient environments in commercial, residential and industrial markets. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings, transport and protect food and perishables, secure homes and commercial properties, and increase industrial productivity and efficiency. We are a \$14 billion global business committed to sustainable business practices within our company and for our customers.

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

