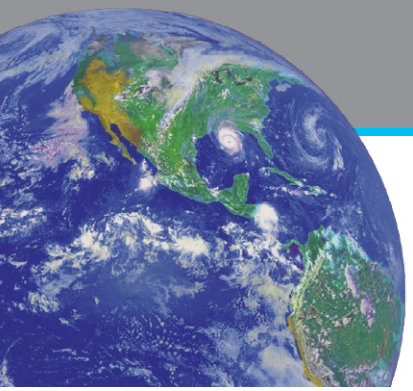
MERKUR®
CLIMATISATION

SUNBOOST® 2019 Series

MERKUR® Solar On-Grid Air-Cons



MERKUR®
GERMAN TECHNOLOGY

SUNBOOST® 2019 Series Solar Air-Cons

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Technical data, dimensions and design reflect todays situation and are subject to change according to the prevailing conditions on production and delivery. They can be changed without prior notice and it is recommended to check the latest data sheets upon finalization of any order.

Ulrich Scheller
General Manager

For 15 years the **MERKUR**® „RENEWABLE ENERGY" Devision takes care and responsibility for the future of our world by engineering and distributing sustainable energy saving products. Especially for the Arabian and African market were are offering a wide range of green products like solar systems, solar street lighting , solar air-conditioners and on-off grid hybrid energy solutions.

One of the most efficient and convincing green solutions for sunny and warm environments are Solar Aircons. In this segment **MERKUR**® has more than ten years of experience. Our state of the art Solar Aircon Range is not only reasonable and innovative but it is also in line with the need in the market to save on the operating costs. This applies especially for the **MERKUR**® SUNBOOST® series On-Grid Solar Aircons which are offering the best value for money and a very short amortization of the moderate initial investment.

MERKUR® is offering two lines of Solar Aircons:

SUNBOOST® SERIES

This is our On-Grid Dual Voltage Solar Air-Conditioning solution for all kinds of buildings. These smart Air-Con-systems are working with dual power: During the day they are running to a large extent with solar-energy produced by the solar panel array directly connected to the Air-Conditioner. If there is not enough Green Energy, the intelligent PCB Controller will either add-on additional power or let the grid completely provide for the power needed to operate the unit. This has the benefit that there is no energy storage needed, which brings the total system cost down significantly. This system can normally not run under off-grid conditions, unless it will be configured in a Hybrid configuration adding inverters and energy storage systems. Such solutions are also available.

SOLMATE® SERIES

This range is our first choice for off grid environments. The intelligent systems are storing and managing solar power in a most efficient way. Due to the necessity for Energy Storage of these systems the entire investment for such a system is quite large. For that reason these systems are mainly being used by professional operators such as industries , oil and gas, mining and Telecommunications industries.

SOLMATE-PRO® SERIES

Our SOLMATE-PRO® series does therefore incorporate extra alarm features to allow remote control/remote reading for such cases.

MERKUR® is offering assistance during the planning and design phase of your future cooling systems and last but not least you can be sure of a perfect sales and after-sales management.

Get in contact with us – together we can achieve sustainable and economic green Air-Con-Solutions for the benefit of our planet and the future generations

General Manager

SUNBOOST® 2019 Series Solar Air-Cons

SUNBOOST® Series
MERKUR Solar On-Grid Air-Con

MERKUR's latest innovation of solar DUAL VOLTAGE grid tied air conditioners feeding solar energy into the unit making your life more affordable by significantly reduced power consumption.

- Based on PV (Photovoltaic) power generation technology from PV array directly connected to the outdoor unit.
- Upto 100% energy saving in good weather conditions
- Unique PSCM (Power Supply Control Module)
- Maximum power input from PV panels upto 2500W (refer user manual)
- Significantly reduced grid power consumption during the day.
- Automatic switching form Solar-Power to Grid-Power at night or during bad weather
- Operating at low noise
- Optional "Feed-In" mode for the periods of non-operation of air-conditioner or overproduction of solar power adding to more savings overall even if not operating the air-conditioner. Applicable only in Feed-In tariff environment!
- Input Voltage: 50-380 VDC and 165-265VAC Nominal Operating Voltage: 220-240V AC 50/60Hz
- High quality and high efficiency Toshiba (GMCC) compressor
- Remote control and easy installation
- Cooling Mode, optional Cooling & Heating Mode
- Refrigerant R410A
- CE and ROHS certification
- Can run smoothly at temperatures from -10°C to 55°C
- Simple operation
- Auto Protection capability in case of malfunction and Auto Restart function

SUNBOOST® 2019 Series Solar Air-Cons

MERKUR SUNBOOST series
3D Inverter Aircon

Indoor Unit:

- high density air filter offering healthy comfort
- easy installation
- 2way drainage
- fireproof electric box

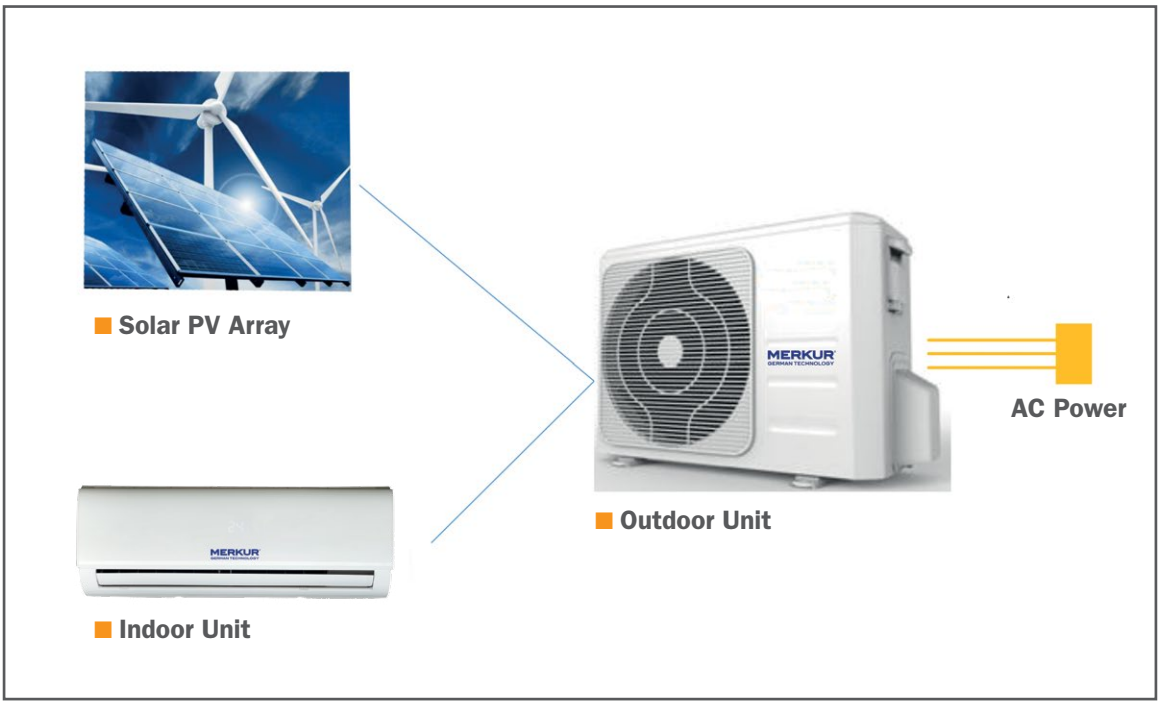
Outdoor Unit:

- reinforced housing structure
- easy installation
- easy maintenance
- improved low temperature performance
- low noise

Main Features:

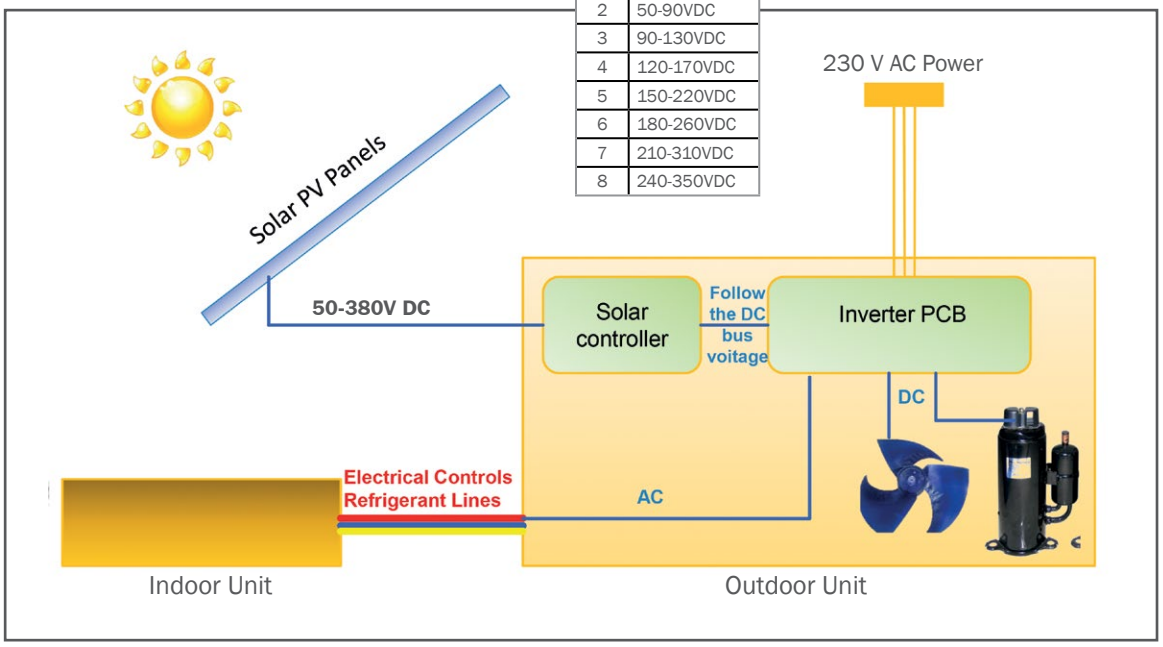
- boosted inverter capacity
- solar controller integrated
- maximum solar panel power 2500W (refer user manual)
- operates with 2-8 solar panels (refer user manual)
- 9000 - 48000 Btu cooling capacity

Merkur SUNBOOST series main components:



System overview

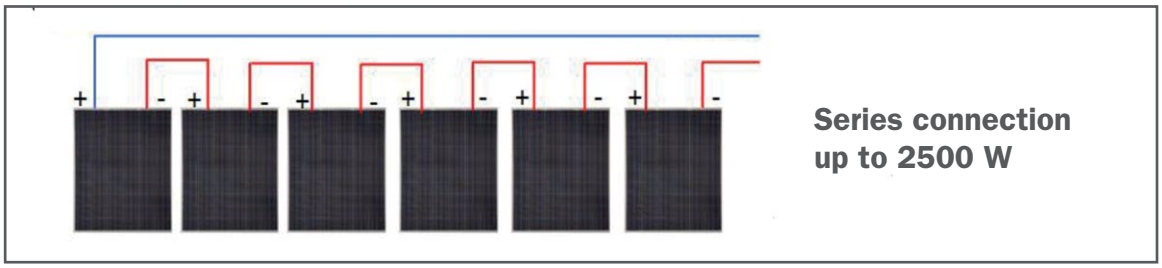
Solar Panels: Power	
Qty.	Output voltage
2	50-90VDC
3	90-130VDC
4	120-170VDC
5	150-220VDC
6	180-260VDC
7	210-310VDC
8	240-350VDC



The PCB controller automatically gives priority to solar power!

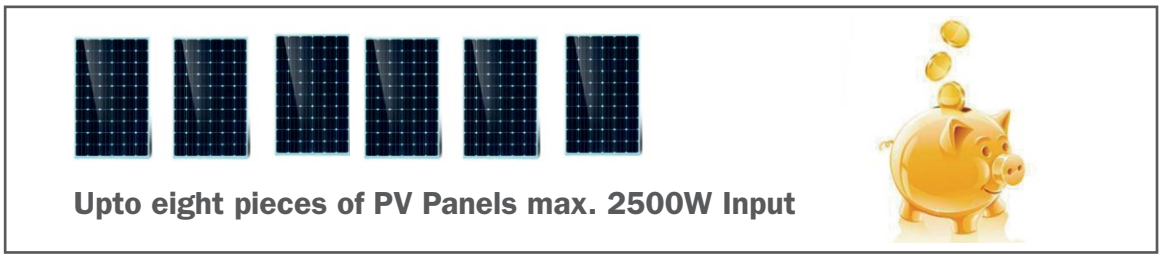
Sunboost series advantages:

Easy and economic installatation:



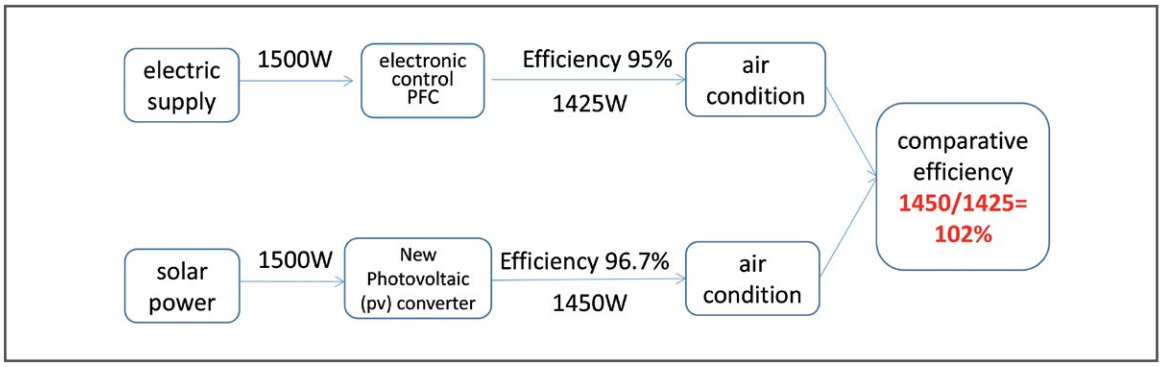
The Sunboost Air-Conditioner system can accept upto 8 solar PV panels. The rated output power of the PV array may reach maximum 2500W! (refer user manual)

The more solar power fed in, the less elecric cost from the utility provider!



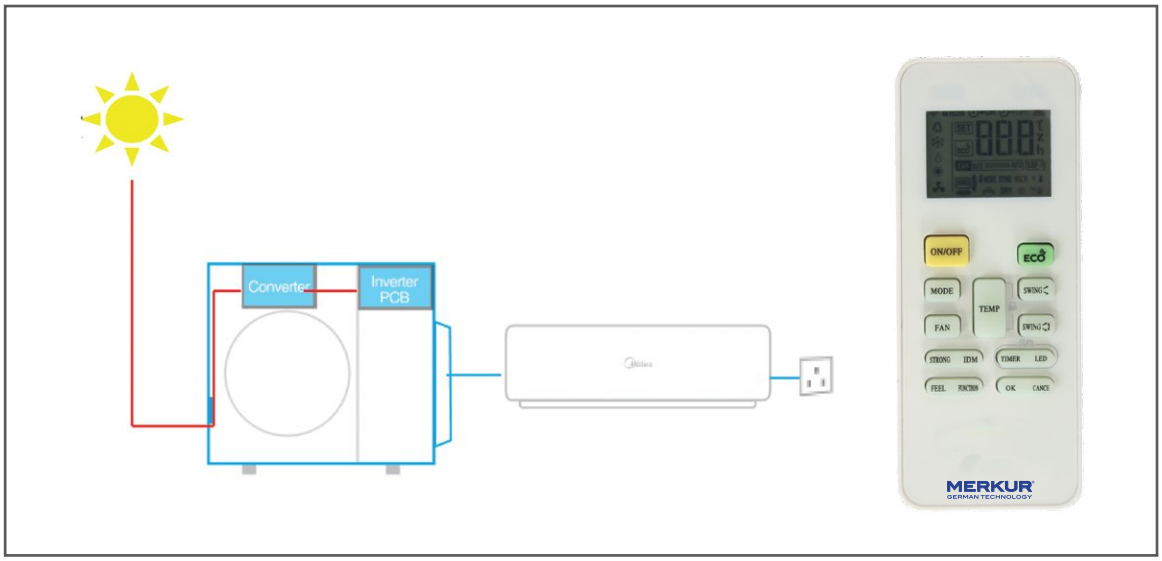
Sunboost series solar air-cons have todays highest possible PV power feed-in capacity!

Best efficiency:



By adopting optimized circuit design and improved software, efficiency of the air-cons improves from 85% to 96.7% !

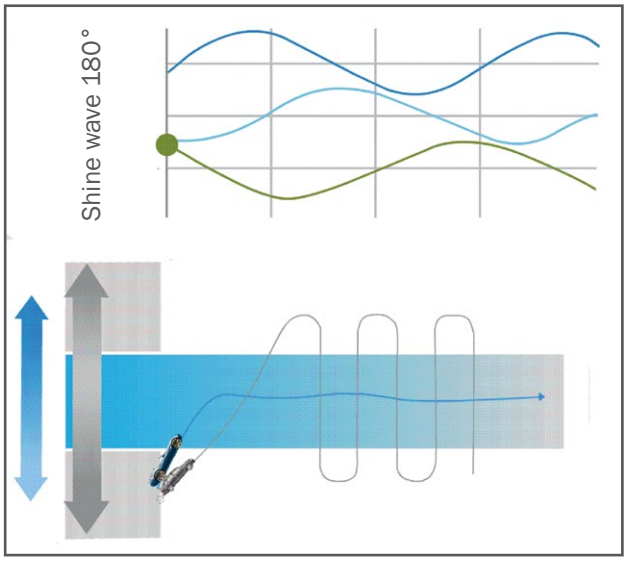
ECO Mode for reduced power consumption under low or no solar power availability operation:



The ECO mode implies the constant monitoring of the AC input power consumption fluctuation.

In low of no solar power status the system will limit the maximum permissable mains AC power consumption to a preset value configured by means of the remote control.

180° Sine Wave DC inverter



The 180 degree Sine Wave DC Inverter offers considerable advantages:

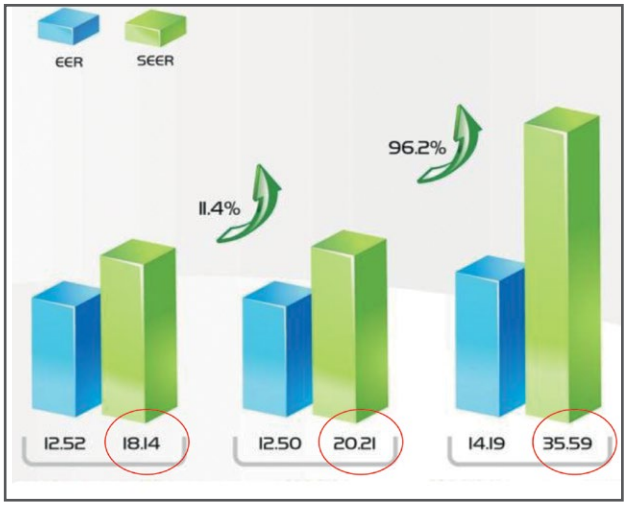
- Functionality over a much wider range of frequencies
- Higher efficiency offers higher energy savings
- Smooth and low noise operation
- Low vibratons
- More reliable and extended life time operation

Brushless DC motor

The DC motor allows fine rotation control, which reduces energy consumption.

The DC motor also provides improvements in operational efficiency of up to 35%, compared to an AC motor.

Green Energy



Great efficiency improvement when using solar panels.

3D DC VS Normal DC: 11.4% higher.

3D DC with two solar panels VS Normal

DC: 96.2% higher.

Energy Saving

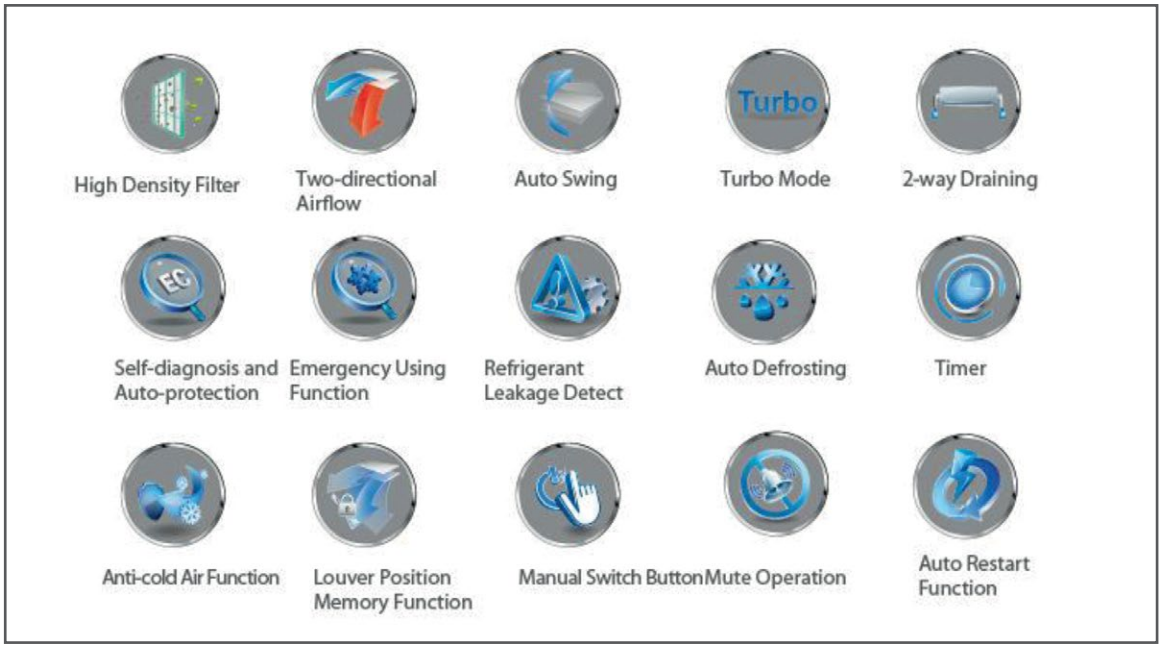
Energy Saving comparison of different types of Air Conditioner Technology at the example of 12000Btu / 1ton split unit ACs

Type	Energy/day	Energy/month	Energy/year
Non-Inverter	6.4 Kwh	192 Kwh	2304 Kwh
Normal Inverter	4.1 Kwh	123 Kwh	1476 Kwh
Solar Inverter (three PV panel)	1.7 Kwh	51 Kwh	612 Kwh
Solar Inverter (four PV panel)	0.9 Kwh	27 Kwh	324 Kwh
Solar Inverter (six PV panel)	0.16 Kwh	4.8 Kwh	57.6 Kwh

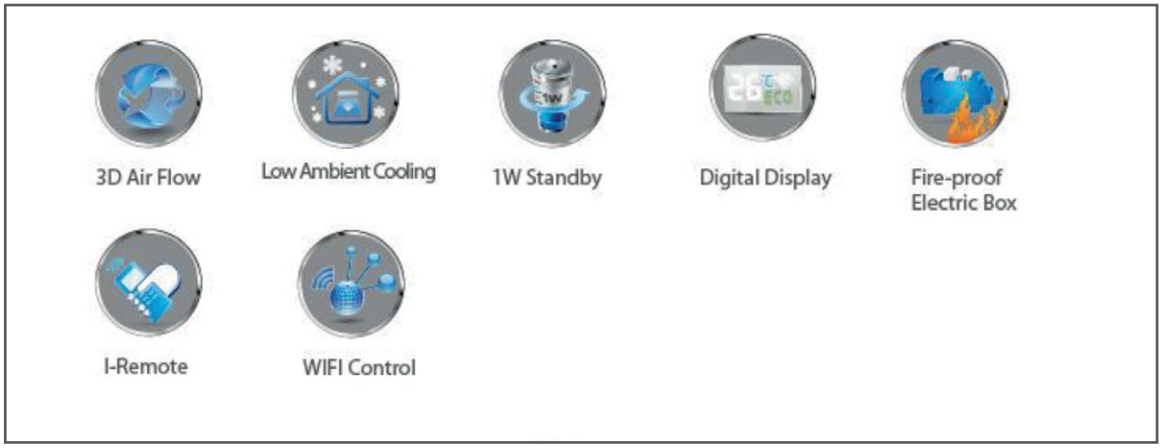
Test analysis parameters:

- outdoor temperature 35 degr. C
- indoor temperature 23 degr. C
- daily operation 8 hours a day 9amto 5pm
- solar power to be fed into compressor only
- calculation assumes standard lab conditions, in reality the actual performance will differ according to actual deviations of operation conditions due to prevailing conditions during actual operation!

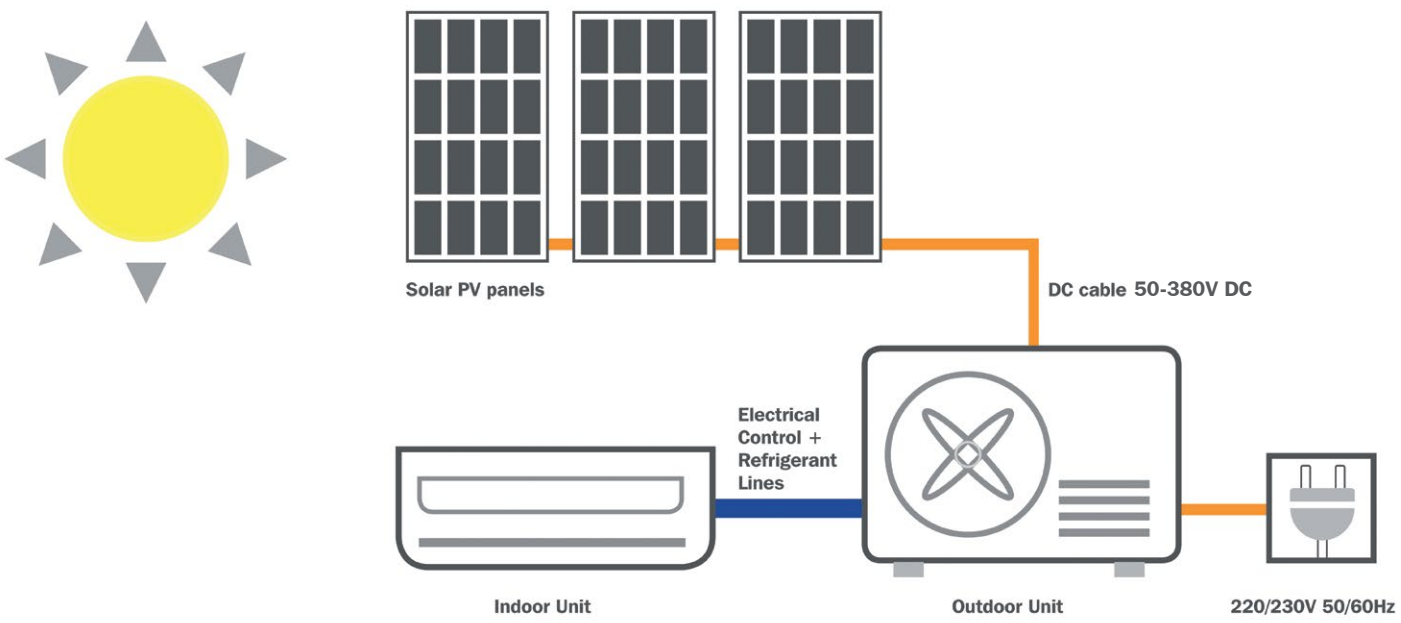
Standard features:



Optional features:



WALL MOUNTED Split Type On-Grid Dual Voltage Solar Air-Con



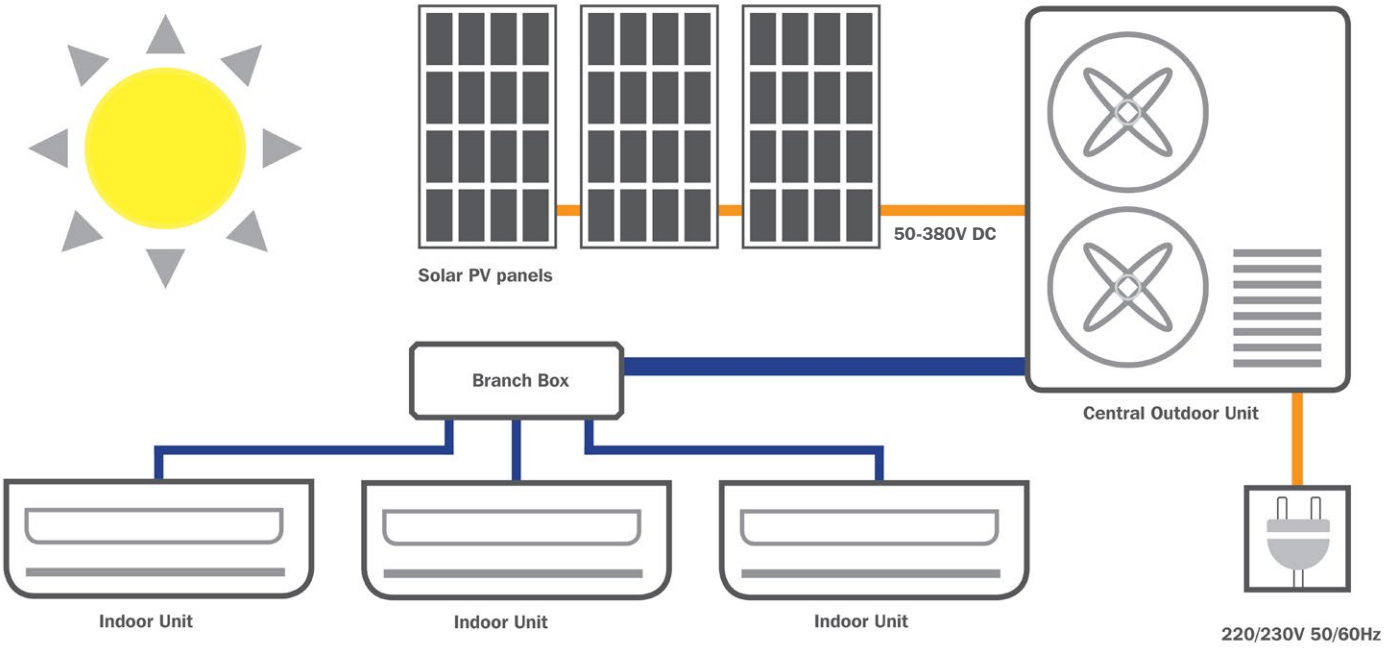
Main Technical Features

- AC/DC Dual Power
- Easy to install, no need of solar controller, battery or inverter
- Hybrid system using DC power as priority
- Direct PV 48V power without conversion process
- Microprocessor controlled and operating on DC power
- Compressor driven by special CPU, infinite veriabel speed, high efficiency compressor
- Low voltage power drive for all electric parts, minimun energy loss
- Intelligent Defrost Mode, independent Dehumidification Mode, Sleep Mode
- Optional WiFi Control oder computer centralized control

WALL MOUNTED Split Type On-Grid Dual Voltage Solar Air-Con

Model			LGS-26HX/CQTB	LGS-35HX/CQTB	LGS-50HX/CQTB	LGS-70HX/CQTN	LGS-100HX/CQTN
Power AC			220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	9000 (3500-11000)	12000 (3700-14000)	18000 (6200-19500)	24000 (5100-269009	36000 (6500-37500)
		W	590 (100-1200)	865 (110-1500)	1320 (140-1800)	1980 (240-3030)	2850 (320-3510)
	Heating	Btu/h	9500 (3800-11500)	13000 (4000-15000)	19000 (4700-20000)	25000 (5500-30000)	37500 (7000-39000)
		W	625 (120-1200)	880 (130-1510)	1465 (200-1900)	2050 (260-3140)	3000 (350-3650)
Rated current	Cooling	A	2.68 (0.45-5.45)	3.93 (0.5-6.82)	6 (0.6-8.18)	9 (1.0-13.2)	12.9 (1.45-15.95)
	Heating	A	2.84 (0.5-5.45)	4 (0.59-6.869	6.66 (0.9-8.63)	9.32 (1.1-13.7)	13.6 (1.59-16.59)
Air Circulation (Hi/Mi/Lo)	m^3/h		570/470/370	570/470/370	721/566/458	970/780/590	1150/900/700
Suitable Area	m^2		12-18	16-23	24-35	32-47	47-63
Noise Level	Indoor Hi / Mi / Lo	db(A)	41/36/28	41/36/28	43/37/32	45/39/34	46/40/35
Operation Temperature		°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C
Ambient Temperature	Cooling	°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C
	Heating	°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Dimensions						
Indoor Unit	Net	mm	805x194x285	805x194x285	957x213x302	1040×220×327	1040×220×327
	Shipping	mm	870x270x360	870x270x360	1035x305x380	1120x310x405	1120x310x405
Outdoor Unit	Net	mm	810*310*550	810*310*550	810*310*550	910*340*700	946x410x810
	Shipping	mm	900*400*600	900*400*600	900*400*600	1063*457*780	1090x500x860
	Weight						
Indoor Unit	Net/Gross	kg	8.1/9.9	8.1/9.9	9.5/12.5	11.9/15.2	11.9/15.2
Outdoor Unit	Net/Gross	kg	28.9/33.4	29/33.5	31/36	49.5/56	65/73

MULTIZONE Wall-Mounted Split Type On-Grid Dual Voltage Solar Air-Con



Main Technical Features

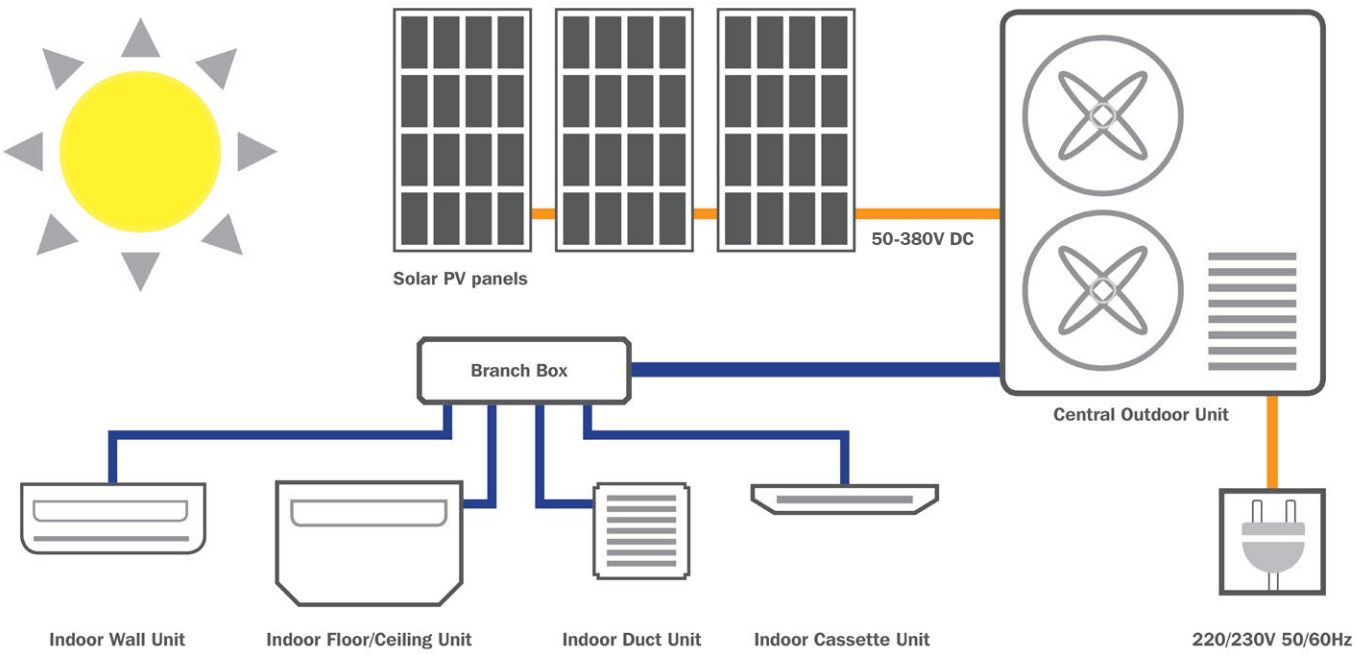
- AC/DC Dual Power
- Easy to install, no need of solar controller, battery or inverter
- Hybrid system using DC power as priority
- Direct PV 48V power without conversion process
- Microprocessor controlled and operating on DC power
- Infinite variable speed, high efficiency compressor driven by special CPU
- Low voltage power drive for all electric parts, minimun energy loss
- Intelligent Defrost Mode, independent Dehumidification Mode, Sleep Mode

MULTIZONE Wall-Mounted Split Type On-Grid Dual Voltage Solar Air-Con

Model			N3PG-18 IG02-N	N4PG-27 IG02-N	N5PG-36 IG02-N	N6PG-48 IG02-N
Typ			Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Power AC			220/230 V 50/60Hz, 1 PH	220/230 V 50/60Hz, 1 PH	220/230 V 50/60Hz, 1 PH	220/230 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	18000	28000	36000	48000
	Heating	Btu/h	19000	28000	36000	48000
EER	Btu		12.5	12.5	11.5	12.5
SEER			22.5	23	22.5	22.4
COP			3.6	3.9	3.4	3.6
HSPF4			10.3	10.3	10.2	10.2
HSPF5			8.8	6.5	8.7	8.3
Minimum Circuit	A		18.0	25.0	30.0	35.0
Maximum Fuse	A		25.0	35.0	45.0	50.0
Reffrigerant	oz		R410A/70.5	R410A/98.8	R410A/105.8	R410A/162.3
Heating at 17F	Rated capicity	Btu/H	12000	17200	23000	29600
Heating at 5F	Maximum capicity	Btu/H	13900	21900	28000	34900
Ambient temperature	cooling	°C	-25~50	-25~50	-25~50	-25~50
	heating	°C	-25~30	-25~30	-25~30	-25~30
Dimensions	Net	mm	845x363x702	946x410x810	946x410x810	952x415x1333
	Shipping	mm	965x395x755	1090x500x875	1090x500x875	1095x495x1480
	Net/Gross	kg	48/52	68/73	71/76	101.5/115.7

Model			NTBCC-09 ISG01-NU1X	NTBCC129 ISG01-NU1X	NTBCF-18 ISG01-NU1X	NTBCF-24 ISG01-NU1X
Typ			Indoor Unit	Indoor Unit	Indoor Unit	Indoor Unit
Power AC			220/230 V 50/60Hz, 1 PH	220/240 V 50/60Hz, 1 PH	220/240 V 50/60Hz, 1 PH	220/240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V
Input	W		22	22	58(Output)	150
Speed	Hi/Mi/Lo		450/348/240	520/360/250	950/620/520	1495
CFN	Hi/Mi/Lo		264/205/141	306/212/147	559/365/306	618/471/324
Noise	Hi/Mi/Lo dB(A)		39/-/24.5	39/-/25	45.5/-/34.5	50/-/35.5
Operation temperature	cooling	°C	17~32	17~32	17~32	17~32
	heating	°C	0~30	0~30	0~30	0~30
Dimensions	Net	mm	802x189x297	802x189x297	1080x226x335	1080x226x335
	Shipping	mm	875x285x375	875x285x375	1155x415x315	1155x415x315
	Net/Gross	kg	8.2/10	8.2/10	13.2/16.8	13.2/16.8

CENTRAL Split Type On-Grid Dual Voltage Solar Air-Con



MERKUR Sunboost Central Air Conditioner System is a dual power AC/DC Hybrid Air-Conditioning system. The power from the solar panel array is used as priority power source and directly fed into the indoor and outdoor units fan motors and into the compressor. In case the solar power does not suffice for the operation of the Aircon, the system automatically feeds in the grid power needed to bridge the gap or even to run the unit on grid power only. The AC/DC interaction ensures uninterrupted power supply.

The wide operating voltage design ensures a free combination of solar panels. Therfore the **MERKUR** Sunboost Central Solar Air Conditioning System is only limited by the scarcity of the installation area available for the PV array. The minimum requirement for solar power installed for the smallest outdoor unit is 1800W and 5000W for the outdoor units of more than 36000BTU / 3 tons systems.

MERKUR offers comprehensive support for the SUNBOOST Central Solar System clients. Every system will especially be designed as per the individual requirements for each project.

CENTRAL Split Type On-Grid Dual Voltage Solar Air-Con

Main indoor components:

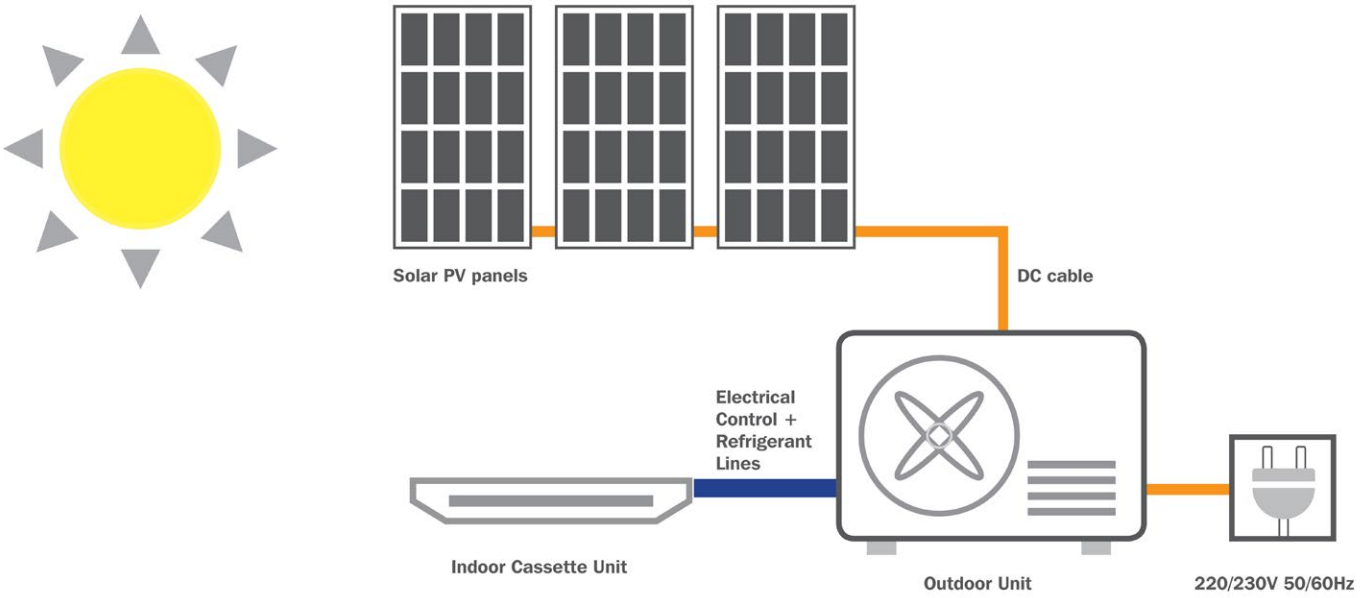
- Indoor unit duct type
- Indoor unit cassette type
- Indoor unit ceiling floor type
- Floor Standing Unit Type
- **MERKUR** Sunboost Central solar aircon System can also be combined with wall mounted units

Main Technical Features

- AC/DC Hybrid dual power system
- High efficiency
- Easy and convenient instatllation without solar charger, battery or converter.
- Use the PV power as priority, the utilization rate more than 90%
- Grid AC power and PV power interact, achieve non-stop power supply.
- Wide voltage (50V-360V), achieve solar panel free combination according to installation space.

Additional optional features central series:

CASSETTE Split Type Central On-Grid Dual Voltage Solar Air-Con



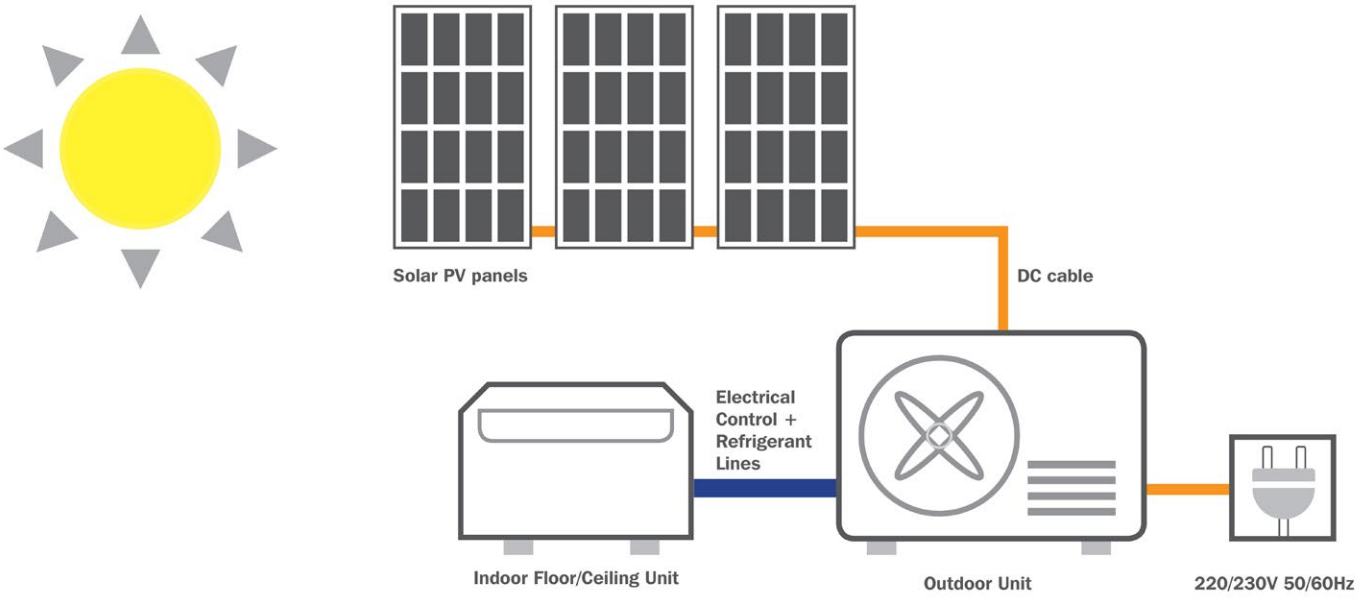
Main Technical Features

- AC/DC Hybrid dual power system
- Compact, elegant design for minimum ceiling height
- Front panel with 25mm thickness can be installed in almost all ceiling designs without affecting interior decor
- The thickest part of the cassette is only 24 cm
- Low Noise turbo fan
- Wide angle air flow: 60 degrees from top to bottom
- Grid AC power and PV power interact, achieve non-stop power supply.

CASSETTE Split Type Central On-Grid Dual Voltage Solar Air-Con

Model			LG-35RX/CQT	LG-50RX/CQT	LG-70RX/CQT	LG-100RX/CQT	LG-140RX/CQT
Power AC			220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	12000 (4000-13000)	18000 (6500-20000)	24000 (9500-26000)	36000 (11000-38000)	48000 (15000-49500)
		W	931 (150-1510)	1358 (220-2000)	1933 (330-2580)	2881 (500-3100)	4398 (900-4550)
	Heating	Btu/h	13000 (4300-14400)	19000 (6700-23000)	25000 (9800-26000)	37500 (12000-39000)	49500 (16000-49800)
		W	1072 (180-1575)	1487 (260-2200)	1979 (350-2650)	2997 (500-3150)	4570 (920-4690)
Rated current	Cooling	A	4.23 (0.68-S.86)	6.17 (1.0-9.09)	8.79 (1.5-11.73)	13.09 (2.27-14.1)	19.99 (4.1-20.68)
	Heating	A	4.87 (0.82-7.16)	6.76 (1.18-10.6)	8.99 (1.59-12.05)	13.62 (2.27-14.32)	20.77 (4.18-21.32)
Air Circulation (Hi/Mi/Lo)	m^3/h		750/550/450	800/600/500	850/650/500	1050/900/700	1900/1700/1350
Suitable Area	m^2		16~23	24~35	32~47	47~63	70~90
Noise Level	Indoor Hi / Mi / Lo	db(A)	40/36/33	40/36/33	40/36/33	46/40/36/28	51/48/45
Operation Temperature		°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C
Ambient Temperature	Cooling	°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C
	Heating	°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Dimensions						
Indoor Unit	Net	mm	590"590"260	840"840"240	840"840"240	840"840"285	840"840"285
	Shipping	mm	675*675"310	855"885*260	855"885*260	855*885*305	855*885*305
Outdoor Unit	Net	mm	835*320*540	835*320*540	910*340*700	910*310*1330	910*310*1330
	Shipping	mm	900*400*600	1063*480*760	1063*480*760	1090x500x860	1080*440*1490
	Weight						
Indoor Unit	Net/Gross	kg	31 / 37	36 / 44	40 / 48	43 / 51	52 / 58
Outdoor Unit	Net/Gross	kg	35 / 40	39 / 44	54 / 59	65 / 73	130 / 138

FLOOR CEILING Split Type Central On-Grid Dual Voltage Solar Air-Con



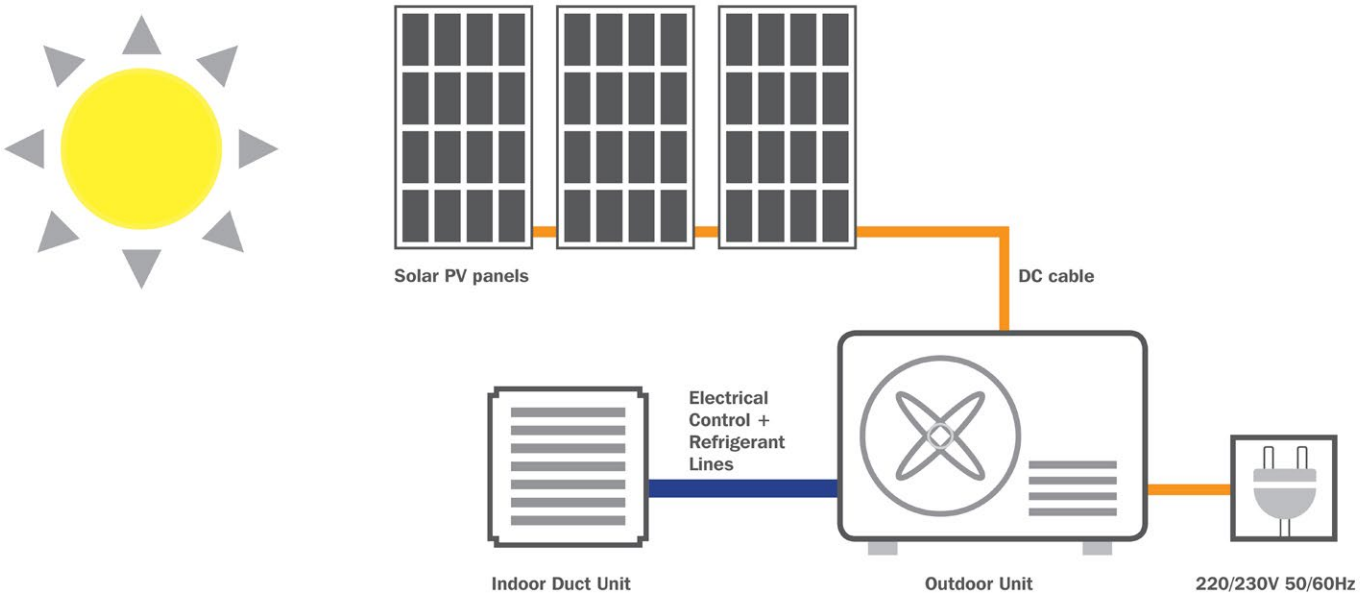
Main Technical Features

- AC/DC Hybrid dual power system
- High efficiency
- Modern design to coordinate with different space requirements, unit can be installed in convertible mode or placed on the floor. The maintenance space required is smaller and accessed more conveniently.
- Nearly quiet operation: the aerodynamically tested flap structure minimizes operational sound even at high fan speed.
- Easy and convenient instatllation without solar charger, battery or converter.
- Wide angle air flow in 3 dimensions: 70 degree from top to bottom and 100 degree from left to right.
- Grid AC power and PV power interact, achieve non-stop power supply.

FLOOR CEILING Split Type Central On-Grid Dual Voltage Solar Air-Con

Model			LG-35EX/CQT	LG-50EX/CQT	LG-70EX/CQT	LG-100EX/CQT	LG-140EX/CQT
Power AC			220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	12000 (4000-13000)	18000 (6500-20000)	24000 (9500-26000)	36000 (11000-38000)	48000 (15000-49500)
		W	935 (150-1510)	1353 (220-2030)	1945 (330-2600)	2850 (500-3150)	4409 (900-4650)
	Heating	Btu/h	13000 (4200-14400)	19000 (4700-21000)	25000 (9800-26500)	37500 (12000-39000)	49500 (16000-49800)
		W	1060 (180-1575)	1487 (260..2220)	1986 (350-2675)	3000 (500-3200)	4604 (920-4800)
Rated current	Cooling	A	4.25 (0.68-6.86)	6.15 (1.0-9.23)	6.84 (1.5-11.62)	12.95 (2.27-14.32)	19.93 (4.1-21.14)
	Heating	A	4.91 (0.82-7.16)	6.76 (1.18-10.09)	9.02 (1.59-12.16)	13.63 (2.27-14.54)	20.93 (4.18-21.82)
Air Circulation (Hi/Mi/Lo)	m^3/h		750/600/480	900/700/550	1500/1200/800	1400/1200/1000	1400/1200/1000
Suitable Area	m^2		16~23	24~35	32~47	47~63	70~90
Noise Level	Indoor Hi / Mi / Lo	db(A)	45/41/38	48/42/38	47/43/39	49/46/42	49/46/42
Operation Temperature		°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C
Ambient Temperature	Cooling	°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C
	Heating	°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Dimensions						
Indoor Unit	Net	mm	905*673*243	905*673*243	1288"673*243	1672*673*243	1672*673*243
	Shipping	mm	995*675*311	995*675*311	1375*675"311	1760*765*311	1760*765*311
Outdoor Unit	Net	mm	835*320*540	835*320*540	910*340*700	910*310*1330	910*310*1330
	Shipping	mm	900*400*600	1063*480*760	1063*480*760	1090x500x860	1080*440*1490
	Weight						
Indoor Unit	Net/Gross	kg	32 / 38	32 /38	42 / 48	52 / 59	56 / 63
Outdoor Unit	Net/Gross	kg	35 / 40	39 / 44	54 / 59	65 / 73	130 / 138

CONCEALED DUCT Split Type Central On-Grid Dual Voltage Solar Air-Con



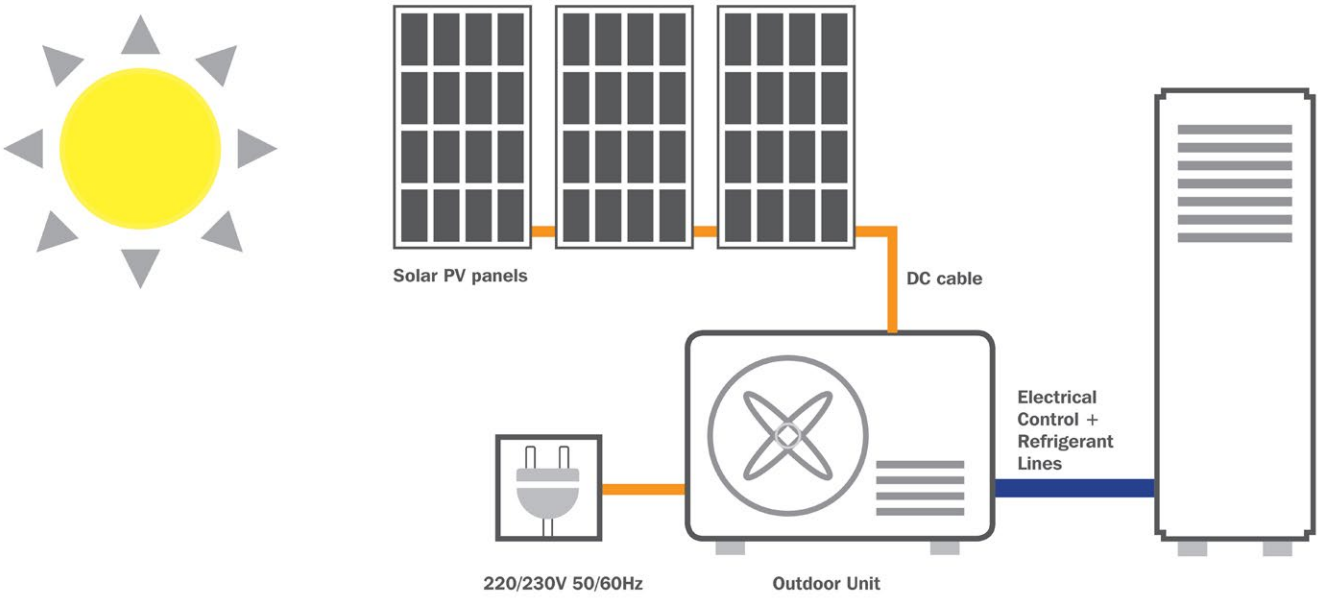
Main Technical Features

- AC/DC Hybrid dual power system
- High efficiency
- Only 20 cm super thin design (9000 - 12000 btu) saving space
- Multi vane design for more comfortable and hamorious rooms
- Easy and convenient instatllation without solar charger, battery or converter.
- Super-long refrigerant pipe design.
- Low noise run by 26 dB
- Grid AC power and PV power interact, achieve non-stop power supply.

CONCEALED DUCT Split Type Central On-Grid Dual Voltage Solar Air-Con

Model			LG-350X/CQT	LG-500X/CQT	LG-700X/CQT	LG-1000X/CQT	LG-1400X/CQT
Power AC			220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	12000 (4000-13000)	18000 (6500-20000)	24000 (9500-26000)	36000 (11000-38000)	48000 (15000-49500)
		W	928 (150-1465)	1341 (220-1950)	1925 (330-2600)	2832 (500-3050)	4386 (920-4600)
	Heating	Btu/h	13000 (4200-14400)	19000 (4700-21000)	25000 (9800-26500)	37500 (12000-39000)	49500 (16000-49800)
		W	1072 (180-1500)	1487 (260-2155)	1971 (350-2560)	2986 (500-3120)	4567 (920-4750)
Rated current	Cooling	A	4.22 (0.68-6.66)	6.09 (1.0-8.86)	8.75 (1.5-11.36)	12.87 (2.27-13.86)	19.93 (4.1-20.91)
	Heating	A	4.87 (0.82-6.82)	6.76 (1.18-9.79)	8.96 (1.59-11.64))	13.57 (2.27-14.18)	20.76 (4.18-21.59)
Air Circulation (Hi/Mi/Lo)	m^3/h		900/700/550	900/700/550	1500/1250/1900	1900/1700/1350	1900/1700/1350
Suitable Area	m^2		16~23	24~35	32~47	47~63	70~90
Noise Level	Indoor Hi / Mi / Lo	db(A)	43/40/38	43/40/38	47/42/40	50/48/45	50/48/45
Operation Temperature		°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C
Ambient Temperature	Cooling	°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C
	Heating	°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Dimensions						
Indoor Unit	Net	mm	1060*580*250	1060*580*250	1390*580*250	1700*580*250	1700*580*250
	Shipping	mm	1075*595*265	1075*595*265	1405*595*265	1715*595*265	1715*595*265
Outdoor Unit	Net	mm	835*320*540	835*320*540	910*340*700	910*310*1330	910*310*1330
	Shipping	mm	900*400*600	1063*480*760	1063*480*760	1090x500x860	1080*440*1490
	Weight						
Indoor Unit	Net/Gross	kg	28 / 33	28 /33	38 / 45	42 / 48	45 / 51
Outdoor Unit	Net/Gross	kg	35 / 40	39 / 44	54 / 59	65 / 73	130 / 138

FLOOR STANDING Split Type Central On-Grid Dual Voltage Solar Air-Con



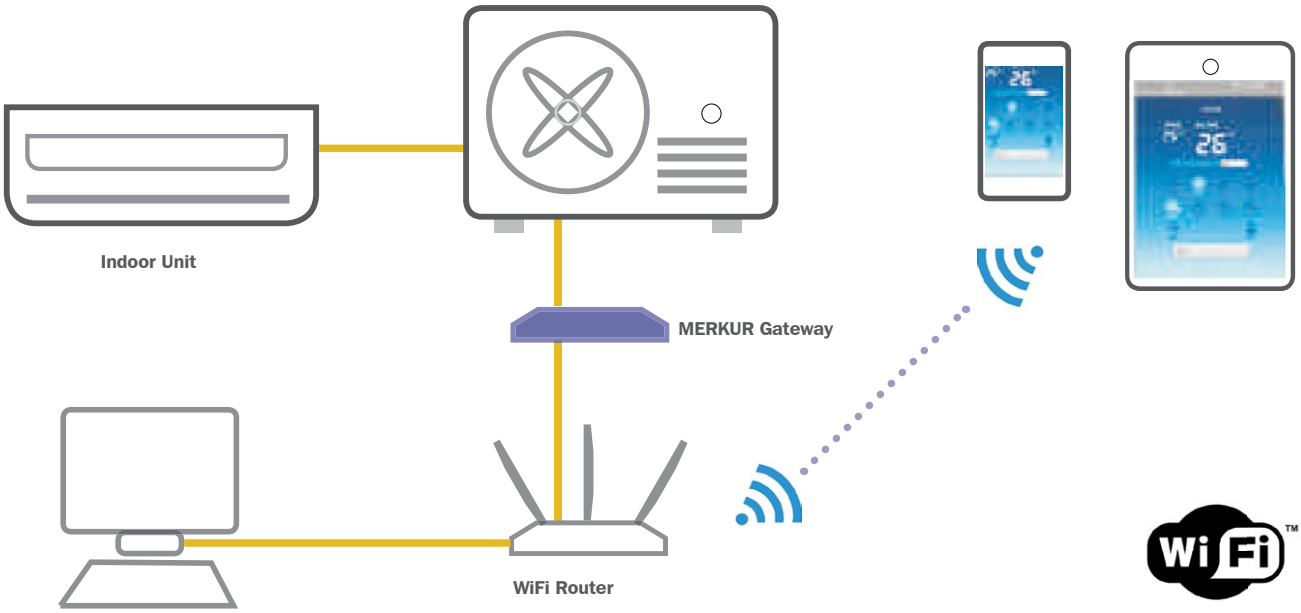
Main Technical Features

- AC/DC Hybrid dual power system
- High efficiency
- Magnificent desig with liquid crystal display
- Long distance and wide-angle airflow.
- Large-diameter turbofan dan vortex duct are incorporated for powerful and quiet airflow.
- Easy and convenient instatllation without solar charger, battery or converter.
- Use the PV power as priority, the utilization rate more than 90%
- Grid AC power and PV power interact, achieve non-stop power supply.

FLOOR STANDING Split Type Central On-Grid Dual Voltage Solar Air-Con

Model			LG-50MX/CQT	LG-70MX/CQT	LG-100MX/CQT	LG-120MX/CQT	LG-140MX/CQT
Power AC			220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH	220-240 V 50/60Hz, 1 PH
Power DC			50-380 V	50-380 V	50-380 V	50-380 V	50-380 V
Capacity	Cooling	Btu/h	18000 (6500-20000)	24000 (9500-26000)	36000 (11 000-38000)	41000 (13000-42500)	48000 (15000-49500)
		W	1353 (220-2030)	1945 (330-2600)	2850 (500-3150)	3513 (650-3650)	4409 (900-4650)
	Heating	Btu/h	19000 (4700-21000)	25000 (9800-26000)	37500 (12000-39000)	43500 (13800-43000)	49500 (16000-498009
		W	1487 (260-2220)	1966 (350-2675)	3000 (500-3200)	3629 (680-3800)	4604 (920-4800)
Rated current	Cooling	A	6.15 (1.0-9.23)	8.84 (1.5-11.82)	12.95 (2.27-14.32)	15.97 (2.95-16.59)	19.93 (4.1-21.14)
	Heating	A	6.76 (1.18-10.09)	9.02 (1.59-12.16)	13.63 (2.27-14.54)	16.49 (3.09-1727)	20.93 (4.18-21.82)
Air Circulation (Hi/Mi/Lo)	m^3/h		900/700/600	1000/800/650	1500/1250/900	1900/1700/1350	2300/1800/1500
Suitable Area	m^2		24~35	32~47	47~63	60~80	70~90
Noise Level	Indoor Hi / Mi / Lo	db(A)	45/42/40	47/43/40	50/48/45	54/48/45	56/50/47
Operation Temperature		°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C	17°C ~ 30°C
Ambient Temperature	Cooling	°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C	18°C ~ 52°C
	Heating	°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C	-15°C ~ 34°C
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Dimensions						
Indoor Unit	Net	mm	540*280*1785	540*280*1785	540*350*1785	540*350*1785	540*350*1785
	Shipping	mm	625*375*1855	625*375*1855	625*455*1855	625*455*1855	625*455*1855
Outdoor Unit	Net	mm	810*310*550	910*340*700	946x410x810	910*310*1330	910*310*1330
	Shipping	mm	900*400*600	1063*457*780	1090x500x860	1080*440*1490	1080*440*1490
	Weight						
Indoor Unit	Net/Gross	kg	38/45	44/51	48/55	48/55	51/58
Outdoor Unit	Net/Gross	kg	31/36	49.5/56	65/73	118/126	130/138

SUNBOOST WiFi Remote Control



SUNBOOST® Series WiFi Remote control

MERKUR's WiFi Remote control allows to control your **SUNBOOST®** Air-Con by computer, laptop, smarthpone or tablet.

- Intelligance smart home solution
- Control the **SUNBOOST**-System from anywhere with your samrtphone or laptop connectet through 3G/4G or WiWi
- Comfortable and easy to use App
- Central control of all parameters
- Control every unit in your house from any room
- Aditional to standard remote control
- Easy to install

MERKUR Air-Con Range 2019:

Our product range also includes the following air conditioners:

SOLMATE® 2019 series

■ **SOLMATE® SERIES**
This range is our first choice for off grid environments. The intelligent systems are storing and managing solar power in a most efficient way. Due to the necessity for Energy Storage of these systems the entire investment for such a system is quite large. For that reason these systems are mainly being used by professional operators such as industries , oil and gas, mining and Telecommunications industries.

SOLMATE® PRO 2019 series

■ **SOLMATE-PRO® series**
Our SOLMATE-PRO® series includes all kind of SOLMATE® Air-Cons incorporate extra alarm features to allow remote control/remote reading for professional environments.

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