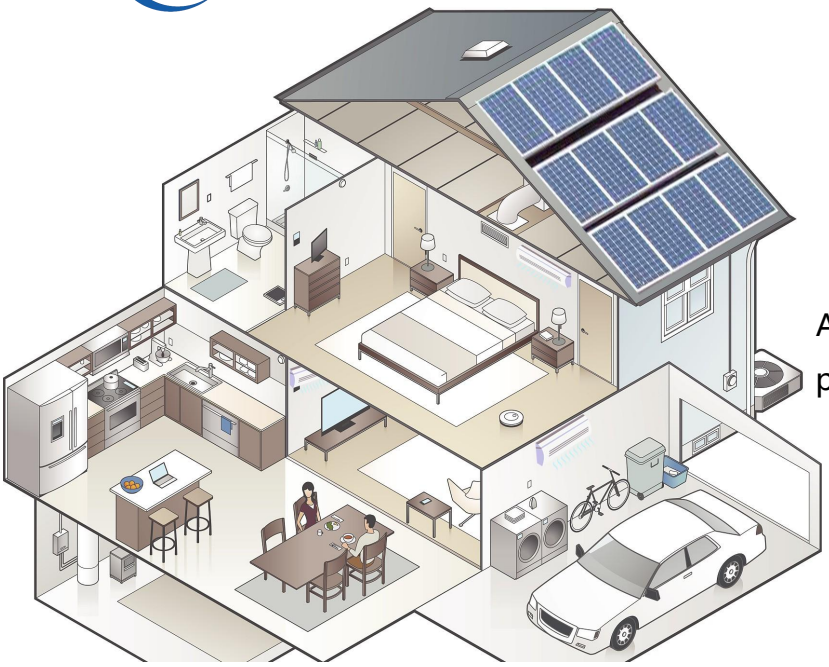
Make the world greener, make the world beautiful

Solar Air Conditioner

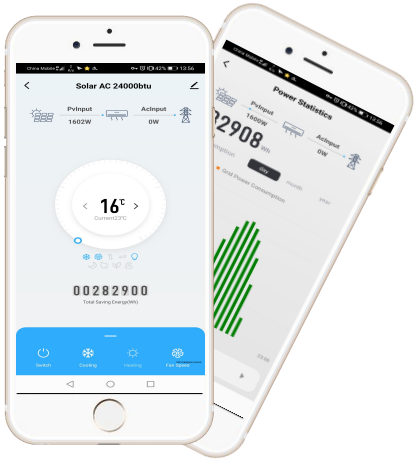


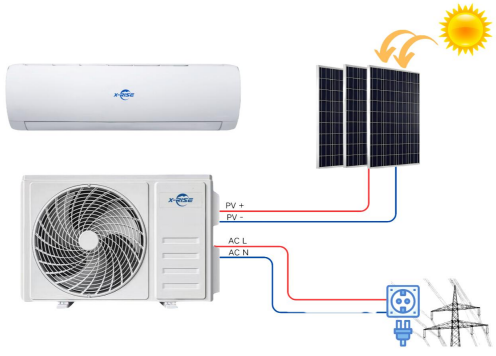
Application

Areas without electricity, low power,unstable power grids,and high electricity prices where air conditioner is in demand.

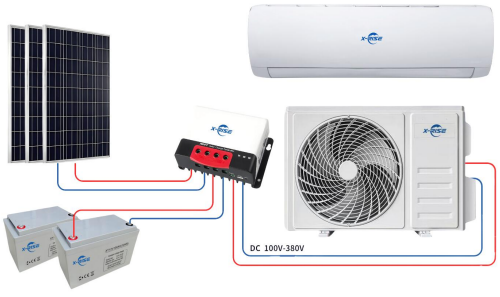
Core Technology:

1.Low power consumption and high energy saving efficiency;
2.All DC：dc compressor, dc motor , dc valve;
3. Variable speed air compressor to achieve the soft start and quick cooling / heating;
4. Wider working frequency range and DC working voltage range;
5. Smooth running with low noise level;
6. The working voltage for off grid solar air conditioner system is 48V DC which is easy to configure the system.
7. T3 Tropical 58 degree working
8. APP control and power saving indicator are optional.





Solar AC/DC Hybrid Inverter air conditioner



DC Off-grid Solar Air Conditioner

Web:www.xrise906.com +86 6467 6468 helsing@xrise906.com Industrial Park,Yaohai District,Hefei,Anhui,China

AC/DC Solar Hybrid Air Conditioner

Daytime

100% solar operation

100% power saving

Solar + grid hybrid operation

Solar priority, utility power supplement

Night

100% grid operation

Valley electricity operation

Places with mains electricity are preferred

Solar& AC hybrid Conditioner system suggested configuration

Cooling/Heaeting Capacity				Rated Power Consumption(W)	Solar Part		
Model	HP	TON	BTU		Solar Panel	Power	Energy Saving
XRIACDC9000-V1	1	0.75	9000	660	330W/31.6V*3pcs	990W	60%~100%
XRIACDC12000-V1	1.5	1	12000	960	550/42.0V*3pcs	1650W	
XRIACDC18000-V1	2	1.5	18000	1420	550/42.0V*4pcs	2200W	
XRIACDC24000-V1	3	2	24000	1830	550/42.0V*5pcs	2750W	

Note:If there are special requirements for the working time of air conditioner, the system configuration needs to be recalculated.

AC/DC Solar air conditioner system parts

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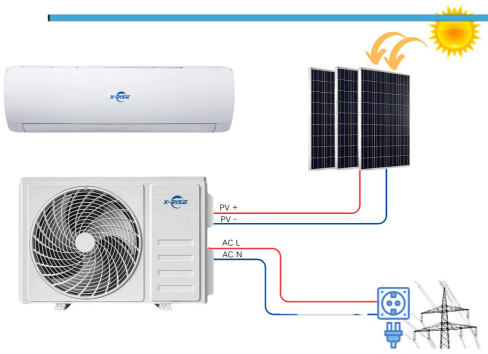
9000BTU 12000BTU 18000BTU 24000BTU

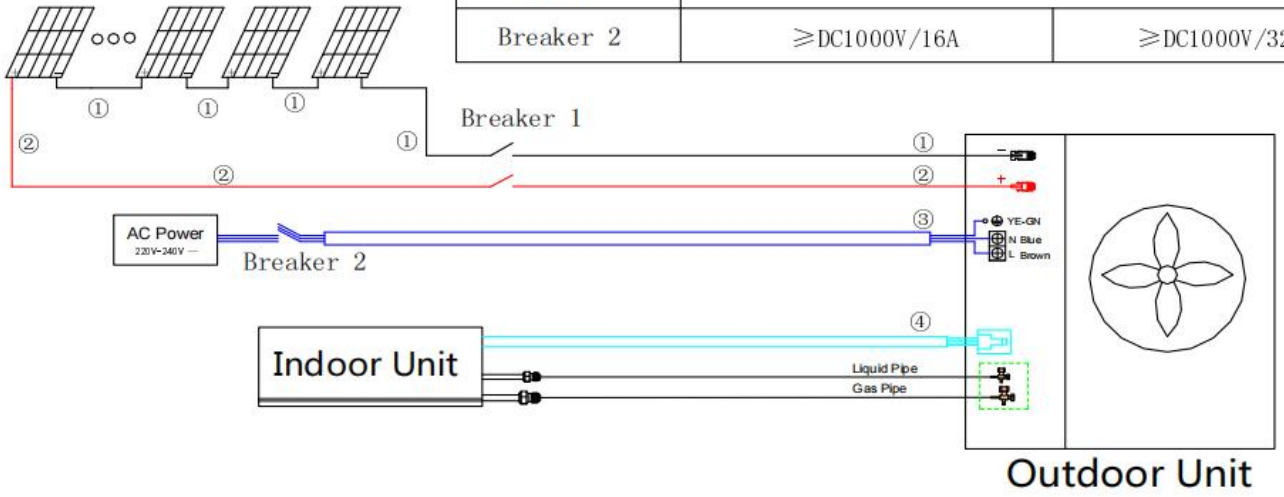
T1/T3 Solar Hybrid AC/DC Air Conditioner

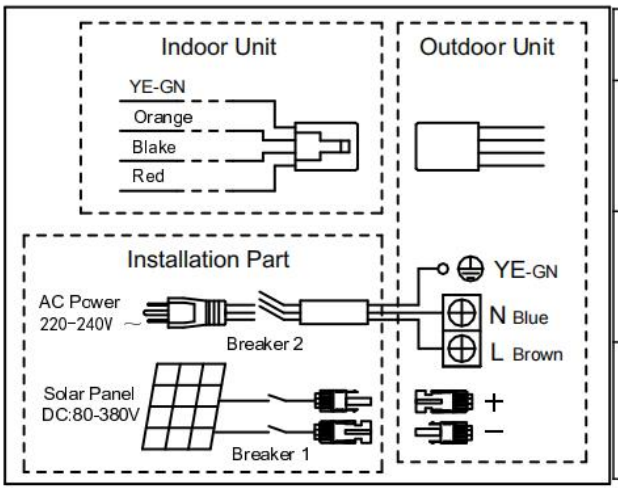
Model No.			XRIACDC9000-V1	XRIACDC12000-V1	XRIACDC18000-V1	XRIACDC24000-V1
Power Supply	Solar input	V	DC70-380V MAX.15A			
	AC input	V	208-240V50/60Hz			
Cooling	Capacity	Btu/h	9000	12000	18000	24000
	Power Input	W	660	960	1420	1830
	Rated Current	A	3	4.4	6.1	8
	SEER	Btu/h	23	22	21	20
	EER	Btu/h	13.6	12.5	12	12
Heating	Capacity	Btu/h	9000	12000	18000	24000
	Power input	W	670	1028	1375	1820
	Rated Current	A	3.2	5.9	5.9	8
	HSPF	/	10	11	10	11
	COP	Btu/h	13.4	11.7	12.4	12.08
	Dehumidification	L/H	1	1.3	1.9	2.3
Indoor air flow(Hi/Mi/Lo)		cfm	360/340/295	360/340/295	810/320/278	910/340/270
Indoor Noise (Hi/Mi/Lo)		dB(A)	41/38/32	41/38/32	48/40/32	49/41/35
Outdoor fan motor	Model	/	D-40-8	D-40-8	D-69-8	D-69-8
	Input	W	82	82	102	93
Outdoor Noise		dB(A)	53	53	56	60
Max Refrigeration Pipe Length		ft/m	49/15	49/15	49/15	49/15
Max Refrigeration Pipe Rise/Fall		ft/m	16/5	16/5	16/5	16/5
Max Elevation Difference		/	49/15	49/15	49/15	49/15
Refrigerant Charge		(g/oz)	1150/41	1150/41	1600/56	2100/74
Design Pressure(Hi/Lo)		psig	550 / 340	550 / 340	550 / 340	550 / 340
Operation temperature	Indoor (Cooling/Heating)	℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃
	Outdoor (Cooling/Herating)	℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃
Indoor Unit	Dimension(W*D*H)	mm	850*290*205	850*290*205	970*315*235	1100*330*235
		inch	33.46"*11.42"*8.07"	33.46"*11.42"*8.07"	38.19"*12.40"*9.25"	38.19"*12.40"*9.25"
	Packing(W*D*H)	mm	920*370*285	920*370*285	1045*385*320	1160*390*300
		inch	36.22"*14.57"*11.22"	36.22"*14.57"*11.22"	41.14"*15.16"*12.60"	45.67"*15.35"*11.81"
	Packing(W*D*H)	kg	10/12	10/12	14/16.5	16/18
		lb	22/26	22/26	31/36	35/40
Outdoor Unit	Dimension(W*D*H)	mm	860*325*540	860*325*540	890*320*670	890*320*670
		inch	33.86"*12.80"*21.26"	33.86"*12.80"*21.26"	35.04"*12.60"*26.38"	35.04"*12.60"*26.38"
	Packing(W*D*H)	mm	920*395*605	920*395*605	1020*430*755	1020*430*755
		inch	36.22"*15.55"*23.82	36.22"*15.55"*23.82	40.16"*16.93"*29.72"	40.16"*16.93"*29.72"
	Packing(W*D*H)	kg	32/36	32/36	48/53	53.5/58
		lb	71/79	71/79	106/117	118/128
Application Area	m^2/sq.ft		8~15/86~161	12~25/129~269	20~40/215~430	33~49/355~527
Loading Qty by 20'GP/40'GP/40'HQ		pcs	80/160/194	80/160/194	58/120/135	58/120/135
Certification		/	ETL/DOE/ AHRI Certified			

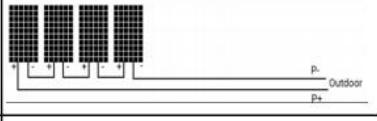
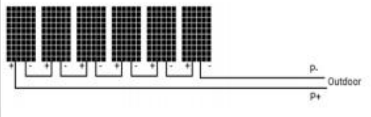
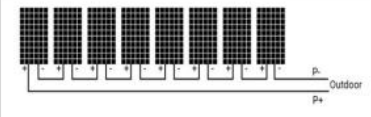


Installation and Connection of Solar Air Conditioner

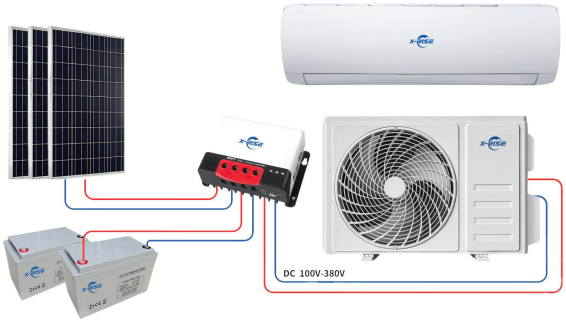
		9000BTU	12000BTU	18000BTU	24000BTU
①	—	PV1-F4mm2/12AWG			
②	—				
③	—	3*1.5mm2/16AWG		3*2.5mm2/14AWG	
④	—	4*1.0mm2/18AWG(Indoor standard configuration)			
Recommed Solar Panel n(3~8)*P(275~350W)		3*330W	4*330W	6*330W	8*330W
Breaker 1		DC1000V ⩾16A			
Breaker 2		⩾DC1000V/16A		⩾DC1000V/32A	





Model	PV panel connection	Recommended quantity
1.5 HP		(280-400W) 4PCS (400-500W) 3PCS
2 HP		(280-400W) 6PCS (400-500W) 5PCS
3 HP		(280-400W) 8PCS (400-500W) 7PCS

DC Off-Grid Solar Hybrid Air Conditioner



Daytime

Night

Solar panels charge batteries through MPPT

The battery supplies power to the air conditioner through MPPT

Can operate day or night

Places without mains electricity are preferred

DC Off-grid Air Conditioner system suggested configuration

Cooling/Heaeting Capacity				Rated Power Consumption(W)	Solar Controller	Solar Part		
Model	HP	TON	BTU		PMW/MPPT	Solar Panel	Batteries	Fuse
XRIDC9000-V2	1	0.75	9000	660	48V/30A	550/42.0V*3pcs	12V125AH*4PCS	30A
XRIDC12000-V2	1.5	1	12000	960	48V/30A	550/42.0V*4pcs	12V150AH*4PCS	30A
XRIDC18000-V2	2	1.5	18000	1420	72V/40A	550/42.0V*8pcs	12V150AH*6PCS	40A
XRIDC24000-V2	3	2	24000	1830	96V/50A	550/42.0V*12pcs	12V250AH*8PCS	50A

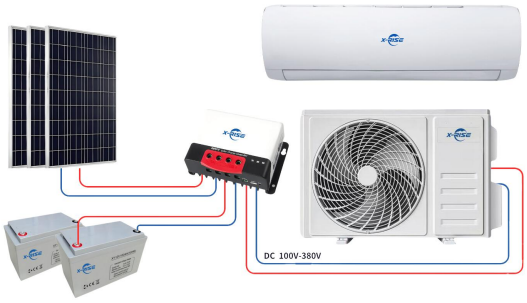
Note:If there are special requirements for the working time of air conditioner, the system configuration needs to be recalculated.

DC Off-grid Solar air conditioner system parts

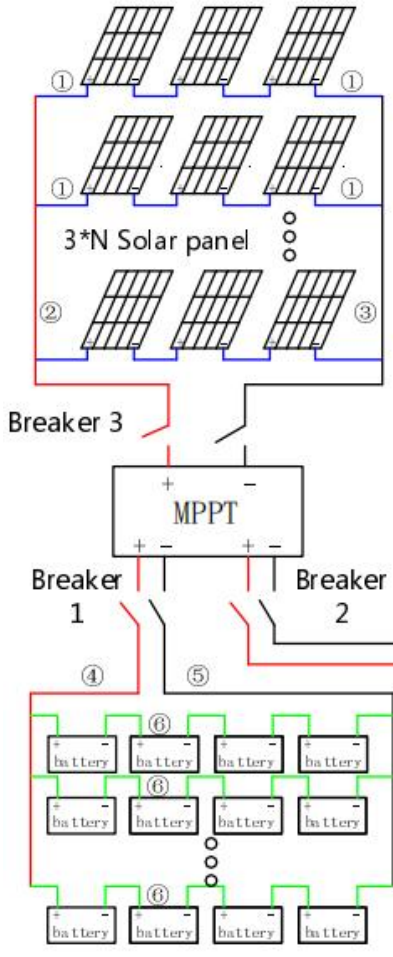
9000BTU 12000BTU 18000BTU 24000BTU

T1/T3 DC Off-Grid Solar Air Conditioner

Model No.			XRIDC9000-V2	XRIDC12000-V2	XRIDC18000-V2	XRIDC24000-V2
Power Supply		V	DC48V	DC48V	DC72V	DC96V
Cooling	Capacity	Btu/h	9000	12000	18000	24000
	Inverter Capacity Range	Btu/h	3071-9570	3071-12966	3412-19449	4094-23200
	Power Input	W	660	960	1420	1830
	Rated Current	A	13.8	20	19.7	19.1
	SEER	Btu/h	23	22	21	20
	EER	Btu/h	13.6	12.5	12	12
Heating	Capacity	Btu/h	9000	12000	18000	24000
	Inverter Capacity Range	Btu/h	3753~9894	3753~13306	4435~19789	5100~23542
	Power input	W	670	1028	1375	1820
	Rated Current	A	14	21.4	19.1	19
	HSPF	/	10	11	10	11
	COP	Btu/h	13.4	11.7	12.4	12.08
	Dehumidification	L/H	1	1.3	1.9	2.3
Indoor air flow(Hi/Mi/Lo)		cfm	360/340/295	360/340/295	810/320/278	910/340/270
Indoor Noise (Hi/Mi/Lo)		dB(A)	41/38/32	41/38/32	48/40/32	49/41/35
Outdoor fan motor	Model	/	D-40-8	D-40-8	D-69-8	D-69-8
	Input	W	82	82	102	93
Outdoor Noise		dB(A)	53	53	56	60
Max Refrigeration Pipe Length		ft/m	49/15	49/15	49/15	49/15
Max Refrigeration Pipe Rise/Fall		ft/m	16/5	16/5	16/5	16/5
Max Elevation Difference		/	49/15	49/15	49/15	49/15
Refrigerant Charge		(g/oz)	1150/41	1150/41	1600/56	2100/74
Design Pressure(Hi/Lo)		psig	550 / 340	550 / 340	550 / 340	550 / 340
Operation temperature	Indoor (Cooling/Heating)	℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃
	Outdoor (Cooling/Herating)	℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃	10-52℃/-15~33℃
Indoor Unit	Dimension(W*D*H)	mm	850*290*205	850*290*205	970*315*235	1100*330*235
		inch	33.46"*11.42"*8.07"	33.46"*11.42"*8.07"	38.19"*12.40"*9.25"	38.19"*12.40"*9.25"
	Packing(W*D*H)	mm	920*370*285	920*370*285	1045*385*320	1160*390*300
		inch	36.22"*14.57"*11.22"	36.22"*14.57"*11.22"	41.14"*15.16"*12.60"	45.67"*15.35"*11.81"
	Packing(W*D*H)	kg	10/12	10/12	14/16.5	16/18
		lb	22/26	22/26	31/36	35/40
Outdoor Unit	Dimension(W*D*H)	mm	860*325*540	860*325*540	890*320*670	890*320*670
		inch	33.86"*12.80"*21.26"	33.86"*12.80"*21.26"	35.04"*12.60"*26.38"	35.04"*12.60"*26.38"
	Packing(W*D*H)	mm	920*395*605	920*395*605	1020*430*755	1020*430*755
		inch	36.22"*15.55"*23.82	36.22"*15.55"*23.82	40.16"*16.93"*29.72"	40.16"*16.93"*29.72"
	Packing(W*D*H)	kg	32/36	32/36	48/53	53.5/58
		lb	71/79	71/79	106/117	118/128
Application Area	㎡/sq.ft		8~15/86~161	12~25/129~269	20~40/215~430	33~49/355~527
Loading Qty by 20'GP/40'GP/40'HQ		pcs	80/160/194	80/160/194	58/120/135	58/120/135
Certification		/	ETL/DOE/ AHRI Certified			



Installation and Connection of Solar Air Conditioner



		9000-12000BTU	18000BTU	24000BTU
①	—	PV1-F 4mm2/12AWG		
②	—	N*4mm2/12AWG		
③	—	N*4mm2/12AWG		
④	—	8mm2/8AWG	16mm2/6AWG	25mm2/4AWG
⑤	—			
⑥	—			
⑦	—	4*1.0mm2/18AWG		5*1.0mm2/18AWG
		Indoor standard configuration		
Solar PV		275W～350W（3*N）		
MPPT		≥40A	≥60A	≥80A
Breaker 1		≥500V/40A	≥500V/60A	≥500V/80A
Breaker 2		≥500V/40A	≥500V/60A	≥500V/80A
Breaker 3		≥500V/40A	≥500V/60A	≥500V/80A
Remark		Solar Panel Open Circuit Voltage(Voc)≤MPPT PV/3