

WECOOL

48VDC A/C LITHIUM POWERED



OFF GRID A/C UNIT
LITHIUM/SOLAR POWERED

WECO

weco@weco.uk.com
www.weco.uk.com



WECCOOL
EXTREME COOLING



A/C COOLING AND HEAT PUMP ALL IN ONE POWERED 48Vdc BATTERY

- ✔ Runs on up to 100% by solar DC power during daytime
- ✔ Only 4 solar panels to have the daytime max power in cooling
- ✔ Lithium equipment WeCoHeSU/LPBK and SDX controller
- ✔ Cooling or heating up to up to 80 sqm
- ✔ Cooling 12000 BTU
- ✔ Adaptive Variable Capacity according with the available power
- ✔ Anti-Corrosion Technology
- ✔ Eco-Friendly R410a Refrigerant
- ✔ Washable Filters
- ✔ Quiet Indoor Unit (As Low As 26dB)
- ✔ Extremely efficient thank to the new compressor
- ✔ High Efficiency, SEER between 21 and 35





DC Powered Indoor unit

One reason that a DC Air Conditioner makes the best use of solar power is because there is no loss associated with converting DC power from solar panels into AC power to run a standard air conditioner



100% DC Powered Outdoor unit

Using standard solar panels which produce native DC power, the 48V DC air conditioners avoid



Brushless fan motor

We use 48V DC brushless fan motors for both indoor and outdoor units. DC brushless fan motors can greatly reduce energy consumption, and run with super low noise. Plus, the use of a brushless permanent magnet motor driver provides a variable frequency drive that allows the system to dynamically adjust its capacity based on conditions.



MPPT Solar charge controller

A Solar charge controller protects the whole system and provides stable power supply
Increased efficiency of the MPPT if used with Li Ion batterie.



Lithium battery harsh environment

High quality Li Ion battery specifically designed for WECOOL OFF Grid.
Can Bus protocol for real time communication and cell equalization
Available monitoring system on CUB8 Server



Top quality solar panels

Approved by Dubai Energy Authority
Tested as per extreme severity standards and used for desert applications





KIT and installation Concept



DC/DC controller



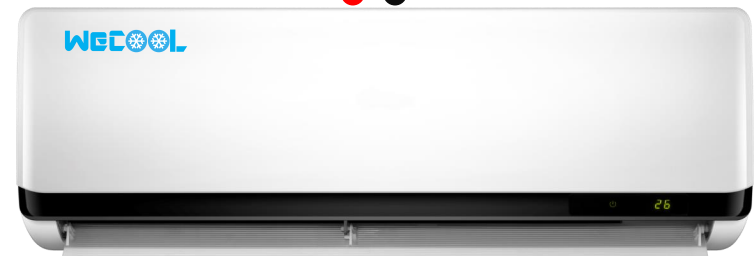
Lithium Battery



3-4 Solar panels (270 – 330Wp)



Compressor



Inner Unit

SPECS

Type	Part number	Nom. input voltage V DC	Capacity Cooling Btu/h	Capacity Heating Btu/h	Power Input Cooling W	Power Input Heating W	SEER W/W	HSPF W/W	Net Weight Indoor/ Outdoor Kg	Net Size Indoor mm	Net Size Outdoor mm
DC48V	DC4812 ITA	42~60	12,000	12,000	250~1050	315~1114	22	11	11/47	850/300/180	800/545/315



Model			DC4812 ITA
Power Supply		V DC	40-60
Cooling	Capacity	Btu/h	11950
	Inverter Capacity Range	Btu/h	3071-12966
	Power Input	kW	0.97
	Rated Current	A	4.35
	SEER		22
	EER		12.9
Heating	Capacity		12,283
	Inverter Capacity Range	Btu/h	3753~13306
	Power Input	kW	1.028
	Rated Current	A	5.9
	HSPF		11
	COP		12.28
Max Overload Protection Breaker		A	10
Dehumidification		pt/h	1.3L/h
Compressor	Type		Rotary
	Brand		GMCC
	Model		ASN108D32UFZ
	Capacity	Btu/h	11124
	Power Input	W	825
	Rated current (RLA)	A	5.8
	Refrigerant oil / Oil charge	oz	370ml
	Input	W	82
	RLA	A	0.69
	Winding Resistance	Ω	52.5
	Speed (Hi/Mi/Lo)	rpm	900/680/500
Outdoor Noise Level		dB(A)	53
Indoor Fan Motor	Input	W	23(Hi)
	RLA	A	0.235(Hi)
	LRA	A	1A
	Winding Resistance	Ω	116.5±8% (20°C)
	Speed (Hi/Mi/Lo)	rpm	1250/1000/850
Indoor Air Flow - (L/M/H)		cfm	650
Indoor Noise dB(A) (L-M-H)		dB(A)	41
Max Refrigeration Pipe Length		ft/m	15
Max Refrigeration Pipe Rise/Fall		ft/m	5
Max Elevation Difference			15
Refrigerant Pipe Size			φ6.35*0.5+φ9.52*0.6
Refrigerant Charge		(g/oz)	1150
Design Pressure		psig	550 / 340
Connection		Type	flare
Connection Wiring		AWG	4*18AWG
Operation temperature	Indoor (Cooling/Heating)	°F	60.8 – 89.6/ 60.8 – 89.6
	Outdoor (Cooling/Herating)	°F	50– 125.6/5-104
Evaporator Dimensions (W x H x D)		in	33.5×11.8×7.8
Evaporator Net Weight		lb	17
Condenser Dimensions (W x H x D)		in	31.3×20.7×11.4
Condenser Net Weight			54
Standards			CE CB EMC

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WeCo srl
Firenze Italia

Tel +39 055 8468044
Tel +39 055 0943010

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