Features & Benefits

This Power Pak can operate as a backup system without solar or an off-grid system complete with solar. All the required components for an off-grid system are inside this box. It comes completely assembled and tested. It is ESA inspected. This unit is extremely easy to install. This is an excellent DIY product.

There are two receptacles on the system, allowing the user to have instant AC power after connecting the batteries. The Power Pak was designed to be sold as a Microgreen kit (complete with panels and batteries) or as the Power Pak only. Batteries and panels can be purchased from another source.

Optional Worldwide Remote Access, (IoT)

This remote access with a Power Pak will create a smart cottage. There is a phone app or a webpage allowing the user to access and control the Power Pak. This app allows the user to see the status of their system and control devices like a fridge or furnace fan remotely. The app has two built-in calendar reminders. These reminders allow the user to set an alarm, as a note of what they need to bring back to the cottage.

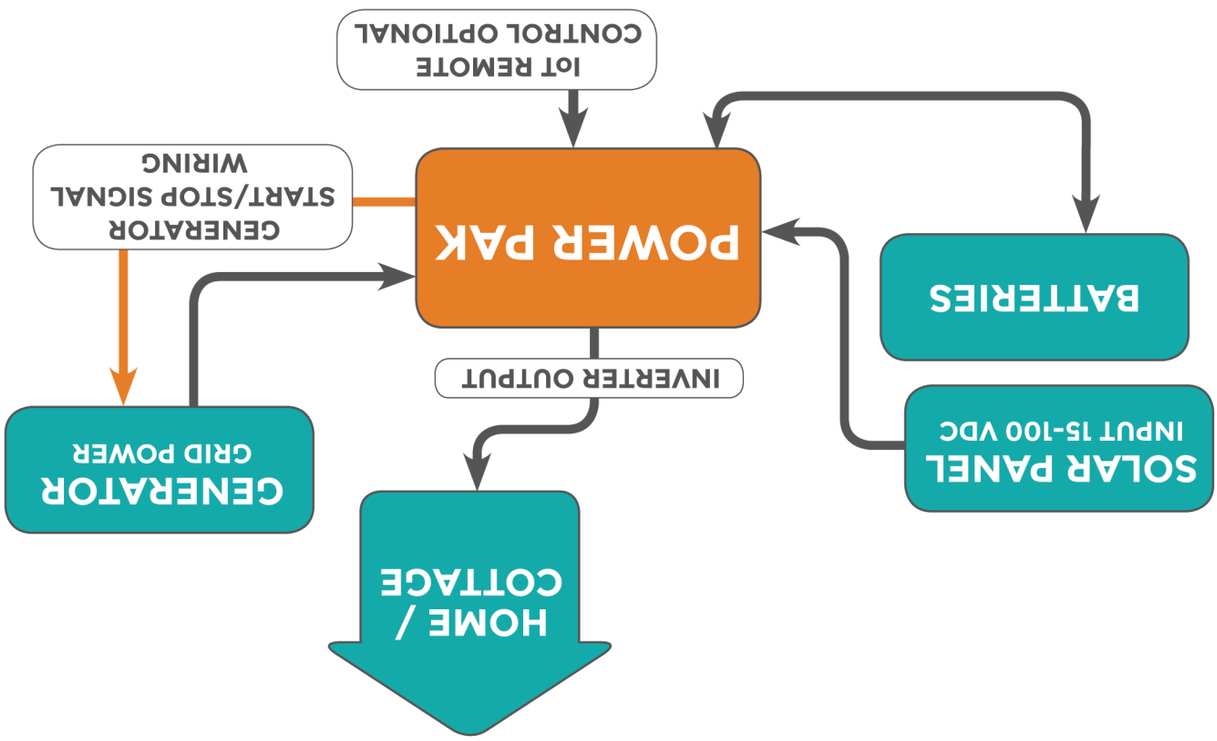
If an alarm occurs on the Power Pak, it will notify the user's phone with an updated status. This status will show the DC volts and amp readings. The AWS cloud records ongoing data. By scrolling back through this data, any previous alarms will show.

This system operates from a 24 volt DC battery bank. The system will accept either AGM or flooded batteries. Flooded batteries must be mounted inside a box in order to vent outside any fumes that occur during the operation.

The system can accommodate either 2—12 volt or 4—6 volt or 12—2 volt batteries when operating the Power Pak. The size and voltage of the batteries will determine how much storage the system can supply. Each of the mentioned configurations is considered a group. The Power Pak can charge a maximum of 5 groups of similar type batteries.

Power Pak Kit

The kit consists of a 4 kW Power Pak along with 2—285 watt CSI solar panels, 4—12 volt 108 amp/hr AGM batteries complete with the approriate battery cables. The kit also includes 2—20 ft lengths of MC4 solar wires and connectors, 20 ft of bare copper ground wire and a ground plate. All of these items together make a complete off-grid system. The only thing required is the mounting hardware for the solar panels. Many options are available.



MICROGREEN

Power Pak

A Complete Off-Grid System In A Box

FEATURES INCLUDED

- **INVERTER** (4 kW, Pure Sine Wave)
- **SOLAR CONTROLLER** (40 Amp)
- **MAXIMUM SOLAR INPUT** (150v 1kW)
- **DC SW** (300 Amp)
- **DC FUSE** (300 Amp)

OTHER FEATURES

- DC Monitor
- AC Monitor
- AC Breakers
- DC Breakers
- Generator Autostart Signal

PRODUCT SPECIFICATIONS

INVERTER OUTPUT	MODEL	Power Pak 4024	
	CONTINUOUS OUTPUT POWER	4000W	
	SURGE RATING (20S)	12000W	
	CAPABLE OF STARTING ELECTRIC MOTOR	12000W	
		4HP	
	OUTPUT WAVEFORM	Pure Sine Wave / Same As Input (Bypass Mode)	
	POWER FACTOR	0.9 - 1.0	
	NOMINAL OUTPUT VOLTAGE RMS	100-110-120VAC / 220-230-240VAC	
	OUTPUT VOLTAGE REGULATION	±10% RMS	
	OUTPUT FREQUENCY	50Hz ± 0.3Hz ± / 60Hz ± 0.3Hz	
	SHORT CIRCUIT PROTECTION	Yes, Current Limit Function (Fault After 1 second)	
	TYPICAL TRANSFER TIME	10 ms (Max)	
DC INPUT	NOMINAL INPUT VOLTAGE	24VDC	
	MINIMUM START VOLTAGE	20 V	
	LOW BATTERY ALARM	22 V / 23VDC	
	LOW BATTERY TRIP	21VDC	
	HIGH VOLTAGE ALARM & FAULT	32VDC	
	IDLE CONSUMPTION-SEARCH MODE	50W When Power Saver On	
CHARGER	INPUT VOLTAGE RANGE	Wide: 90~135VAC / 164~243VAC ;	
	OUTPUT VOLTAGE	Narrow: 100~135VAC / 194~243VAC ;	
	CHARGER BREAKER RATING	Depends On Battery Type	
	MAX CHARGE RATE	40A	
	OVER CHARGE PROTECTION SHUTDOWN	45A Max (Charger Current Control)	
	CHARGER CURVE (4 STAGE CONSTANT CURRENT) 4 STEP DIGITAL CONTROLLED PROGRESSIVE CHARGE	2 - 12V or 4 - 6V	
	BATTERY TYPE	ABSORB	FLOAT VDC
	GEL U.S.A.	28	27.4
	A.G.M 1	28.2	26.8
	A.G.M 2	29.2	27.4
	SEALED LEAD ACID	28.8	27.2
	GEL EURO	28.8	27.6
	OPEN LEAD ACID	29.6	26.6
	CALCIUM	30.2	27.2
	DE-SULPHATION	31V For 4hrs	
	REMOTE CONTROL	Yes, Optional	
BYPASS & PROTECTION	INPUT VOLTAGE WAVEFORM	Sine Wave (Grid or Generator)	
	NOMINAL VOLTAGE	230VAC	
	LOW VOLTAGE TRIP	184V / 154 ± 4%	
	LOW VOLTAGE RE-ENGAGE	194V / 164 ± 4%	
	HIGH VOLTAGE TRIP	253V ± 4%	
	HIGH VOLTAGE RE-ENGAGE	243V ± 4%	
	MAX INPUT AC VOLTAGE	270VAC	
	NOMINAL INPUT FREQUENCY	50Hz or 60Hz (Auto Detect)	
	OUTPUT SHORT CIRCUIT PROTECTION	Circuit Breaker	
	BYPASS BREAKER RATING	30A	
	TRANSFER SWITCH RATING	270VAC	
	MAX BYPASS CURRENT	30 Amp	
MECHANICAL SPECIFICATION	MOUNTING	Wall Mount	
	INVERTER DIMENSIONS (L x W x H)	550mm x 440mm x 185mm	
	INVERTER WEIGHT	35KG	
	SHIPPING DIMENSIONS (L x W x H)	650mm x 550mm x 290 mm	
	SHIPPING WEIGHT	47KG	
	DISPLAY	Status LEDs	
	STANDARD WARRANTY	1 Year	

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