

# Access Standby, On-Demand Power When You Need It!



**INSTANT ON** is expanding the horizon of standby on-demand power through introducing the mobile generator **IO-5M** and **IO-10M**, capable of powering a wide range of appliances!

The IO Mobile batteries are built with the same high power Lithium Iron Phosphate (LiFePO4) cell technology that are used in our commercial and industrial high voltage storage systems, bringing unparalleled safety and reliability.

## FEATURES

- 5.12 kWh or 10.2 kWh of LiFePO4 energy storage capacity
- 2500 W sinusoidal wave inverter
- MPPT solar charge controller
- AC charging
- AC output / USB output
- Scalable with additional battery capacity
- High cycle life
- Wheel mounted
- Plug and Play
- 10 Year limited warranty

## POWER BACKUP WHEN YOU NEED IT

Long hours of power outages do not need to put you or your loved ones at risk. The IO-M is a mobile integrated energy storage system with advanced LiFePO4 battery modules, an inverter, and solar charge controller that can be used to power your critical appliances for hours or even days.

### MULTI PORT CONNECTIVITY

Connect multiple appliances and devices into for hours of runtime use.

### MGen INCLUDES

**Outputs:** 2 x 125V 15A AC;  
1 x 125V 40A max terminal  
2 USB Sockets: 5V / 2A DC

**Input :** PV max 65A  
AC max 40A



### POWER CRITICAL HOUSEHOLD APPLIANCES AND DEVICES

Standard household appliances, home medical devices, power tools, heating or cooling equipment, and electronics can be powered for hours or even days using the MGen.

EQUIPMENT	RUNNING WATTS
Refrigerator	200 W
Home Oxygen Concentrator	325 W
Lights	30 W
Home CPAP/BiPAP	60 to 104 W
Television	200 to 300W
Laptop Computer	140W
Space Heater	900W



10.2 kWh Storage Capacity  
2.5 kW peak continuous power  
65A MPPT Solar Charge Controller



5.1 kWh Storage Capacity  
2.5 kW peak continuous power  
65A MPPT Solar Charge Controller

The backup table will give you an idea of how many hours IO-M can operate on a continuous electrical load.

	Continuous Energy Load									
	25 Watts	50 Watts	100 Watts	200 Watts	500 Watts	1,000 Watts	1,500 Watts	2,000 Watts	2,500 Watts	
IO-5M	205	102	51	26	10	5	3.4	2.6	2.0	hours
IO-10M	410	205	102	51	20	10	6.8	5.1	4.1	hours

Always consult your appliance or equipment manual to determine power consumption.



## BATTERY SPECIFICATIONS

Battery Type	LifePO4
Standard Rated Voltage	51.2 VDC
Standard Rated Capacity	100 Ah per battery
Cycle Life*	>10,000 @50% DOD >8,000 @80% DOD
Optimum Charging Voltage	58.4 VDC
Optimum Charging Current	30 ADC

## INVERTER

Transfer Time	3 to 6 ms; 10 ms (max)
AC Input Range	0 ~ 132 VAC / 0 ~ 264 VAC
Rated Input Voltage	110 VAC
Rated Input Frequency	50 Hz / 60 Hz $\pm 5\%$ / 10% / 15%
Max Charging Current	30A
Output Voltage	110 VAC
Rated Output Power	2500 W
Power Factor	1
Rated Output Frequency	50 Hz / 60 Hz $\pm 1\%$
Waveform	Sinusoidal
Max. Efficiency (resistive load)	$\geq 85\%$
Sleep Mode	Adjustable (< 3% Load)
Output Voltage Harmonic	$\leq 3\%$ Linear Load
Overvoltage Restoration Point	62.0 VDC
Communications	RS232 USB RS485 SNMP WIFI
Noise	< 50 dB
Standards	IEC 62040 / IEC EN 61000

## MECHANICAL / ENVIRONMENTAL SPECIFICATIONS

Width x Depth x Height	23.6 x 27.5 x 43.3 in 600 x 700 x 1100 mm
Weight	MGen 5: 270 lbs MGen 10: 385 lbs
Temperature	140F to 1310F (-100C to 550C)
Humidity	40 to 90%
Certifications	UL 1973 LiFePO4 Cell UL 1741 Inverter

## AC CHARGING

Charging Mode	Dual-stage (CC/CV, Float)
Charging Input Voltage	90 to 132 VAC
Maximum Charging Current	30 ADC
Maximum Charge Voltage	58.4 VDC
Charging Protection	Short circuit Overcurrent Battery full

## MPPT SOLAR CHARGE CONTROLLER

Input Voltage	65 to 120 VDC
Control mode	MPPT
Max Solar Panel Power	3500 W
Max Charging Current	65 ADC
Max Charge Voltage	150 VDC
Protection	Over voltage Reverse polarity Battery full

## MULTI PANEL PARAMETERS

MC4-2 Solar Charge	Highest 60 to 115 VDC / 65A
Anen Terminal DC Discharge	12V / 20 A
Ordinary USB Output	5 VDC / 2.1 A (double)
Tablet PC USB output	5 VDC / 2.1 A (double)
LCD Monitor Display	Battery power Output power Output voltage Charging status
AC Output	120 VAC $\pm 5\%$ (dual output socket)
AC Input	90 to 132 VAC
Power Switch	Inverter output USB output
Work Status Indication	LED lights indicate inverter and USB output status
Undervoltage Protection	20 to 22 VDC
Fans Start	> 1040F (400C)
Overload Alert	105% > Load < 120% $\pm 10\%$
Reverse Protection	Built-in fuse burning
Over-Temperature Protection	>1580F (700C)

The specifications are subject to change without a notice