



ESG -ELECTRIC-FUEL SOLAR GENERATOR

SOLAR/WIND POWER GENERATOR (50-200W OUTPUT POWER)

24/7 POWER TO ELECTRONIC EQUIPMENT

IN SITES WITH NO UTILITY POWER

- **1/5TH THE WEIGHT***
- **1/5TH THE SIZE***
- **5 TIMES LONGER LIFE***
- **REMOTE MONITORING**

*Compared to standard Lead/Acid solutions.

Designed to supply DC power 24/7 to outdoor electronic equipment at off-grid sites with no utility power. An excellent solution for rural or urban sites with limited access to grid power. Electric-fuel's ESG is an innovative and efficient solar/wind power generator leveraging Electric-fuel's highly advanced and safe Lithium maintenance free battery technology.

SYSTEM

- Quiet, safe and reliable operation in heavy dust, rain and snow
- Compact fan-less design utilizing free air convection for cooling
- Efficient MPPT charging algorithms to harvest maximum power
- Remote monitoring using SMBus or Ethernet port
- Real-time monitoring and control
- Modular - add 50W modules as required up to 200W
- Compact pole/wall mounted system
- Designed to blend into the environment when mounted on streetlight poles
- Compatible with all standard 50-350W 17/36V solar panels and wind turbines

LITHIUM BATTERY

- Lithium batteries designed with MIL-SPEC safety features
- Operates in extreme temperatures 0°C to 50°C
- Maintenance-free
- 1500 cycles (5 years)

ADVANCED POWER

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SYSTEM SPECIFICATION

Model	ESG48V/50W	ESG48V/100W	ESG48V/150W	ESG48V/200W
Input				
Input Voltage	5-60VDC any size panel 17V/36V11.25V			
Current (Typ.)	4-8A			
Recommended solar panel	1X250W	2X250W	3X250W	4X250W
Output				
Output power	50W	100W	150W	200W
Output voltage	52-39VDC (optional : 110/230VAC)			
Output Max current	6A	12A	18A	24A
Technology				
Battery	Lithium Ion			
Solar/wind Controller	Advanced MPPT			
Communication	SMBus communication protocol Optional: Ethernet communication			
Alarms & data	Remaining backup time, Number of cycles, AC Fail, Overload, Over temperature, Replace battery			
Battery				
Capacity	32.5Ah	65Ah	97.5Ah	130Ah
Charging power	180W	360W	540W	720W
Operational life	5 years /1500 discharge cycles			
Battery protection	Under/over voltage Under/over current Short circuit Temperature			
Charge time (min)	6 hours			
Ambient temperature	0~ +50°C Optional: Heating mechanism for operation below 0°C			
Humidity	20 ~ 95% RH non-condensing			
Storage Temp	Recommended 20°C. 10 ~ 95% RH			
Standard	CE (for power supply), UL-1642 (for battery cell), UN38.3 (for battery transportation)			
Mechanical				
Dimension cm**	65X40X20		80X60X30	
Weight	20 Kg	30 Kg	45 Kg	55 Kg
Interconnection	2 x PG9 Waterproof connectors			
Mounting	Provision for both wall and pole mounting			
IP Rating	IP65			
Cooling	Free Convection			

Product specifications are subject to change without further notice
** Custom power/size available

COMPANY PROFILE

Electric Fuel is the industrial and medical brand of Epsilon-Electric Fuel Ltd., a world leader in the development and production of mobile energy storage products. Experts in a wide range of electrochemistries, including Lithium Ion, Lithium Polymer, and Zinc Air, and working with clients from the medical, automotive and aerospace sectors, Epsilon-Electric Fuel has the broad-based experience needed to create the optimal portable battery solution for the most challenging applications.

Epsilon-Electric Fuel is part of the power systems division of Arotech Corporation (Nasdaq: ARTX). The division operates from R&D and manufacturing facilities in the United States and in Israel.

HOW CAN WE HELP YOU? CONTACT ELECTRIC FUEL AT:

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