

## Scorpion Systems™ Deployable Renewable Energy



- ✓ **Combat ready**
- ✓ **Reduces fuel consumption by up to 80%**
- ✓ **Takes fuel trucks off the road = saves warfighter lives**
- ✓ **Sets up in 90 minutes or less - 2 warfighters**
- ✓ **Small footprint: 2 small 5'x8' quadcons**
- ✓ **Proven past performance**

### Key Features and Benefits

- Multiple patents pending
- Largest deployable system available: 18kW and up
- 3 Phase
- Ballistic-rated panels
- Shock isolated panel storage
- Simple color coded plug and play design
- Adjustable solar array maximizes energy harvesting at any latitude
- Remote system monitoring software - one screen dashboard design
- GPS system tracking
- High performance AGM/GEL or Lithium-ion batteries
- Integrated Intelligent Power Center (IPC) provides on demand back-up if renewables cannot keep pace with mission requirements
- 100-gallon integrated fuel tank greatly reduces refueling requirements
- Monthly lease or purchase Options

With systems deployed to multiple desert locations around the globe the Scorpion Renewable Energy System has been supporting the U.S. military and its power needs for several years.

The system is intended to accomplish three (3) primary objectives:

1. Save lives by reducing the number of fuel trucks traveling supply routes in war zones
2. Reduce fuel consumption and associated costs
3. Provide meaningful amounts of reliable, renewable power to the warfighter: 18kW or more

The need to reduce our dependence on fossil fuels on the battlefield is now well substantiated. Countless studies have indicated, and military leaders have declared, the need to reduce the number of fuel trucks driving on dangerous supply routes. The typical supply convoy is comprised of 70% fuel, fuel that is going to refill generators providing power for our warfighters' needs. Over 3,500 U.S. casualties can be attributed to protecting these convoys. Take fuel trucks off the road and you save lives. MILSPRAY's Scorpion Renewable Power Solutions provide meaningful amounts of power that can make a meaningful impact on fuel usage.

### Scorpion Fuel Savings

# Scorpion Units	LOAD [kW]	DAY	WEEK	MONTH	YEAR
	[gallons]				
250	2.5	1,000	7,000	30,000	365,000
	5	940	6,580	28,200	343,100
	10	415	2,905	12,450	151,475
500	2.5	2,000	14,000	60,000	730,000
	5	1,880	13,160	56,400	686,200
	10	830	5,810	24,900	302,950
750	2.5	3,000	21,000	90,000	1,095,000
	5	2,820	19,740	84,600	1,029,300
	10	1,245	8,715	37,350	454,425
1000	2.5	4,000	28,000	120,000	1,460,000
	5	3,760	26,320	112,800	1,372,400
	10	1,660	11,620	49,800	605,900

### Scorpion Fuel Reduction

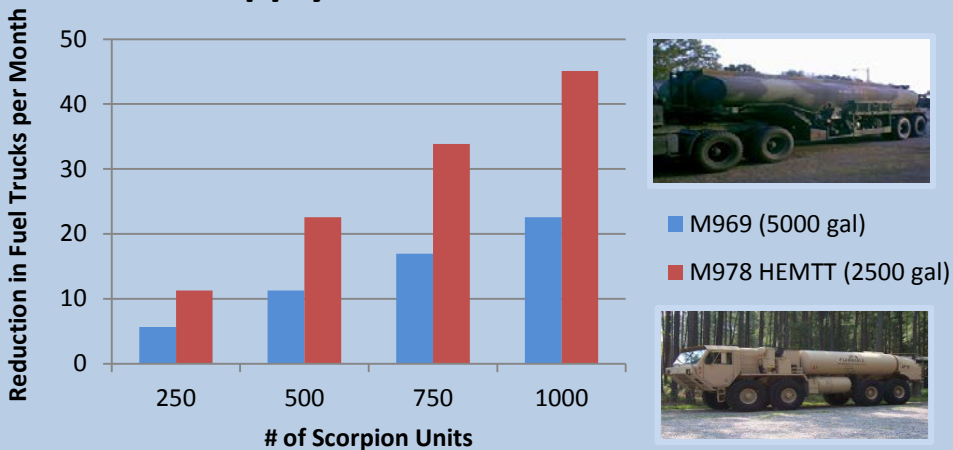
Load [kW]	Fuel Consumption Reduction	Genset Run Time Reduction
5	63%	82%

\* 5kW load based on typical MEP genset utilization

#### Theater Scenario:

Location: Afghanistan  
Solar Insolation: Yearly avg. 6.5 sun-hours/day  
Load: 8 hours/day continuous average  
Savings are vs. 30kW genset

### Fuel Supply Trucks Taken Off The Road



■ M969 (5000 gal)  
■ M978 HEMTT (2500 gal)

