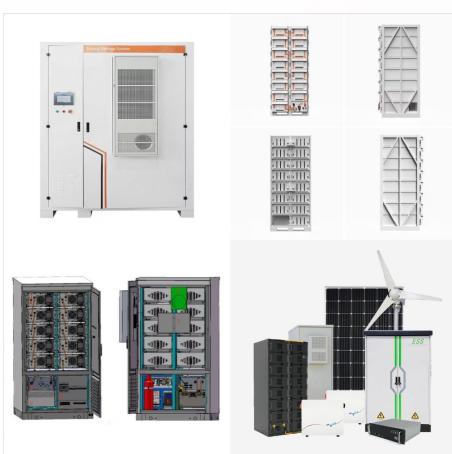




The Ground Renewable Expeditionary Energy Network System (GREENS) Universal Statement of Need (USON) consists of modular man transportable components that when assembled into a system, accepts energy from different sources, distributes the energy using an intelligent management system, and stores excess energy to



and inefficient ground combat systems and vehicles, including main battle tanks and mechanized engineer assets. As a result, the Marine Corps' heaviest ground equipment consumers of fuel and Alternative Communications Energy System (SPACES) and Ground Renewable Expeditionary Energy Network System (GREENS). The Portable Power Scavenge



For example, MCSC oversees the Ground Renewable Expeditionary Energy Network System—a man-transportable module system with renewable energy collection and storage capabilities that can energize communications equipment, a?

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

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A Marine redirects a solar panel from the Ground Renewable Expeditionary Energy Network System during an expeditionary advanced base exercise on Ie Shima, Okinawa, Japan, in October 2021. As expeditionary solar power becomes more viable, Marines' reliance on push-pull power logistics will decrease. U.S. Marine Corps (Jackson Dukes)



3 US Marines use Ground Renewable Expeditionary Energy Network System (GREENS) to power HIMARS and M777 howitzers, eliminating the need to tow a 3kW systems emerging as noteworthy energy storage options for deployed forces. 17. a?|



The portable solar arrays of the Ground Renewable Expeditionary Energy Network System, or GREENS, can power things like computers, radios and weapon systems' batteries and even create a micro-grid.

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

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However, photovoltaic (PV), solar-based, technology applications in the bases in the Middle East and western Asia have been successful. An example of this is the Ground Renewable Expeditionary Energy Network System (GREENS) . The modular solar panels allow flexibility and ease of setting-up in bases.



Ground Renewable Expeditionary Energy Network System (GREENS) A man-transportable power generation system that incorporates solar panels, energy storage, and AC/DC power sources. Lightweight, man-portable, renewable energy system designed to provide power for platoon and squad size units operating in remote locations.

Alternative. Fuels



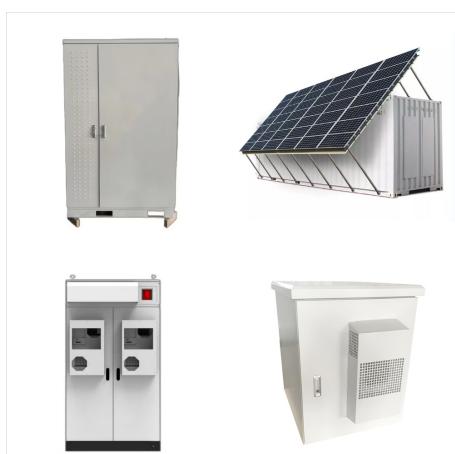
Fueled by the sun, the Ground Renewable Expeditionary ENergy System (GREENS) is a 300-watt, photovoltaic/battery system that provides continuous power to Marines in the field. ONR began exploring

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

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Ground Renewable Expeditionary Energy Network System (GREENS) Search for: Pushing fuel forward on the modern battlefield is expensive in human, capital equipment, and fuel costs. The GREENS is the first viable solution to replace traditional fuel-fired generators. GREENS is a reliable and combat proven hybrid power energy system. It is man



The Ground Renewable Expeditionary Energy Network System (GREENS), a portable, solar-power-generation system, produces a continuous output of 300 watts (W) a?? enough to power a battalion combat operations center. It can also be used to power weapon systems in the battlefield, eliminating the need to turn on and idle vehicles for power or tow



Fueled by the sun, the Ground Renewable Expeditionary ENergy System (GREENS) is a 300-watt, photovoltaic/battery system that provides continuous power to Marines in the field. ONR began exploring the GREENS idea in fall 2008 in response to a Marine Corps requirement from Iraq for an expeditionary renewable power system.

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

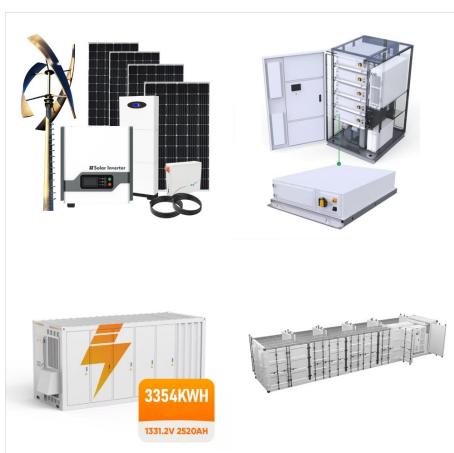
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SPACES a?? Solar Power Adaptor for Communications Equipment System (30 Watt continuous) MHEES a?? Medium Hybrid Expeditionary Energy System GREENS a?? Ground Renewable Expeditionary Energy Network System (300 Watt continuous) MEHPS a?? Mobile Electric hybrid Power System Advanced Power Sources Key Initiatives Production & Deployment



The system collects solar energy and converts it into useable power. Excess solar energy is stored in the array of high energy density battery systems (HEDBS) for use when solar energy Ground Renewable Expeditionary Energy Network System (GREENS) UEC Electronics, LLC | 5914 Howard Street | Hanahan, SC 29410 | 843.552.8682 |



One of the most recent projects to see this plan to fruition was the Ground Renewable Expeditionary Energy Network System, which was recently tested by troops aboard Marine Corps Base Camp Lejeune.

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

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GROUND RENEWABLE EXPEDITIONARY ENERGY NETWORK SYSTEM (GREENS)

TAMCN: A03757G I.D: 12115B NSN:

6117-01-618-5094 Functional Description The GREENS is a modular man-portable solar energy conversion and management system that harvests solar energy using photovoltaic solar panels. Distribution of energy is through a a?|



Last year, when Gen. James Amos, commandant of the Marine Corps, announced the Marine Corps Expeditionary Energy Strategy and Implementation Plan, he stated that the Marine Corps can even be expeditionary in its use of energy. The strategy includes creating,



A system that is widely in current use is the Ground Renewable Expeditionary Energy Network System, GREENS for short. A renewable, hybrid system, GREENS can take electricity from solar, vehicle and generator sources, and optimize it a?|

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

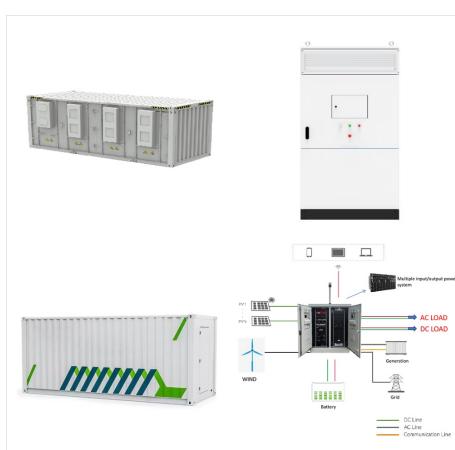
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E2S2 Expeditionary Energy & Sustainment Systems
ERCIP Energy Resilience and Conservation
Investment Program FOB forward operating base
FY fiscal year GREENS Ground Renewable
Expeditionary Energy Network System ISB incident
support base JFO joint field office kW kilowatt NGO
non-governmental organizations NRF National
Response Framework



renewable energy generation, the GREEN system
accepts input from both AC and DC generator
sources. The result: MIL-1275 compliant 28 nominal
VDC, 300 (1000 W Maximum) that is clean, silent,
and reliable. GROUND RENEWABLE
EXPEDITIONARY ENERGY NETWORK (GREEN)
GENERAL SPECIFICATIONS HEDBS PRODUCT
SPECIFICATION. Created Date: a?|



Investments include disruptive technologies in
low-cost photovoltaics, energy scavenging and
power generation, energy storage, energy planning
and energy-efficient small-scale water purification
a?? all to support the sustainment and logistics of
Sailors and Marines deployed in austere
environments.

GROUND RENEWABLE EXPEDITIONARY ENERGY SYSTEM

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The hybrid systems build upon technologies already successfully deployed to Afghanistan. A Marine Corps company, the India 3/5, equipped with SPACES (Solar Portable Alternative Communications Energy System) and GREENS (Ground Renewable Expeditionary Energy System) operated two patrol bases entirely on solar power in the summer of 2010.