MobileMill™

Autonomous Mobile Power System



Above: Indiana Department of Homeland Security Emergency Response Mobile Command Unit – IBEAM. Original Load 4300W, New Load 1400W. Original fuel requirement 11 Gal/Day, New Fuel Requirement 4 Gal/2 Weeks (12 Hour Daily Op).



MobileMill™ as Shown:

Height: Deployed 16'6", Stowed 12'6" **Width:** Deployed 180", Stowed 96"

Length: 204"

Weight: 6800 lbs. w/Trailer Certified: USDOT Specifications Construction: Aluminum and Stainless Wind Collection System: 1.5 kW Solar Collection System: 2.34 kW

PV Control Lower: Independent MPPT to Bat.

PV Control Upper: String to PVI

Energy Storage: 18 kWh, T-Gel 6000 Cycle

Automation: PLC

Electrical Output: 240V/120VAC 60hz, 12VDC Electric Availability: 90 Outlets and USB Priority Bias in Operation: Battery to System Priority Bias in Standby: Grid to System Charge Control Deployed: Dictated by Source

Charge Control During Travel: PV Charge Control Stored: Grid Deployment Time: 60 Seconds

Back-up w/o Grid: 3000W Gas Generator

MobileMill™ Platform

- Designed for semiautonomous or autonomous use cases through the management and seamless integration of wind, solar, fuel and energy storage systems.
- Intelligent multisource power selection programmable "bias" systems provide continuous power availability based on client's criteria including demand, resource, efficiency, etc.
- PLC system integration for automated deployment, stowage or adjustment for resource optimization.
- Single operator system to reduce manpower dependence during set-up and operations.
- Operational spaces and environmental conditions are evaluated during the design cycle to optimize efficiencies so power is available for the critical processes of the use case, without compromising operations environment.
- Systems charge the storage system during transport or directly from the grid if stored inside of buildings allowing for immediate non-fuel based operations once in the field.
- Regardless of final system design size, the operational protocol will:
 - prioritize renewable energy collection for field operations
 - o reduce dependence on gas or diesel generator back-up
 - o provide uninterrupted power regardless of source
 - o reduce set-up time to seconds
 - o reduce manpower to a single operator
 - o allow direct USB interface to the system operation and management from any computer
 - o isolate field operations from external dependence

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Automatic 60-Second deployment • Integrated SolarMill technology • 24-hour clean power generation • 12 hours of autonomous power on demand

Functionality

- Rapid deployment
- Four workstations with task lighting
- More than 90 power outlets
- Virtually quiet operation
- Climate-controlled
- Single operator system deployment

Energy Management

- Energy efficient LED lighting
- Extruded polystyrene insulation
- Inverter technology heating and cooling
- Vented equipment cabinets
- Optimized battery health
- Dynamic energy management system

Customizable blade colors • Vibration-isolated turbine rack •
Ramp loading • Leveling Outriggers •
Stainless steel & aluminum construction