

EXTENDED RUN ENGINE GENERATORS



Innovative Solutions for Your High Integrity Power Needs



RedHawk Energy Systems, LLC
10340 Palmer Rd., S.W.
Pataskala, OH 43062

740-964-4000
740-927-6017 (fax)

www.redhawkenergy.net
info@redhawkenergy.net

We Specialize In:

- Renewable & "Green" Energy Systems
- Remote Site Power Systems
- Battery Systems, Testers, Monitors & Accessories

Our Products Include:

- Photovoltaic (Solar) Power Systems
- Wind Generators
- Fuel Cells
- Extended Run Engine Generators
- Thermoelectric Generators
- Hybrid Power Systems
- RP Series Retractable Masts
- Retractable Wind Generator Pole Adaptors
- Nickel Cadmium Batteries
- Lead Acid Batteries
- RH Series Portable Battery Testers
- Battery Enclosures
- Battery Watering Tools
- Battery Lifting Slings

RedHawk Energy Systems, LLC offers the Marathon Engine Systems Minotaur 2500 Electric Power Systems for remote site power requirements. The Minotaur 2500 has been specifically designed to deliver high quality, reliable, unattended prime power. Long maintenance intervals of up to 4,000 hours and efficient fuel use translates into low operating costs that are particularly important for remote, often difficult to reach locations. The clean, low attention cabinet provides easy access for quick, efficient, and simple service. The use of widely available natural gas or LPG (propane) coupled with worldwide power capability makes the Minotaur 2500 truly unique. Highly engineered components and electronics give a superior degree of reliability; in fact the Minotaur 2500 has the highest reliability of any small internal combustion engine based system available today.

Features:

- Complete 1kW - 2.5kW solution
- Environmentally responsible - runs clean, efficient on natural gas or propane
- Long service interval - typically 4,000 hours - once per year (replacing oil, oil filter and spark plug)
- Liquid cooled - true co-gen capable - total efficiency > 90% (fuel to recovered energy)
- Data acquisition and transmission options for continuous monitoring
- Low noise level - < 65db allows placement in village settings
- Economics of installation/operation over entire life is superior to other solutions

Applications:

- Railway Wayside Remote & Backup Power
- Cathodic Protection
- Remote Sites
- Agriculture
- Telecommunications
- Solar Hybrid Power System



Why Marathon?

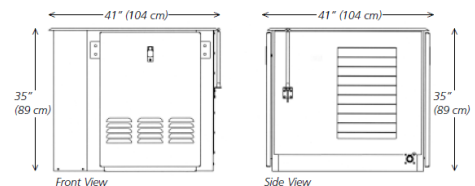
The Marathon Minotaur 2500 provides a lower-cost, reliable solution to remote power needs. No comparable small engine exists that can equal the long life and low maintenance of the Minotaur 2500. When the engine is matched with variable speed, brushless, bearing alternator, the combination permits running at a desirable low rpm rather than at the synchronous 3,600 rpm typical of small-engine generators. Rpm can be selected to fit the load requirement of each particular application. This long-lived, reliable engine generator is available in both AC and DC versions to better match customer needs and to eliminate the need for power conditioning equipment. Because the Marathon Minotaur 2500 is made using production components, its price per kilowatt is significantly lower than that of the competition. The Marathon Minotaur 2500 is very quiet and is weather resistant. With ample power available for most applications, other non-primary power needs at a site can be readily satisfied. Digital, microprocessor control gives flexibility to the system, not only enhancing the available cellular communication feature, but allowing accommodation to site-unique features.



Engine	Engine life is typically 40,000 hours. Special long-life, low deposit oil with 11.4 liter (3.0 gal) sump for 4,000+ hour change interval. Fuel pressure lubrication system. Automatic shutdown for low oil pressure, high coolant temperature, overspeed: de-energized ignition shuts off fuel supply. 12VDC automotive gel-cell battery for 'black-start' capability
Electric	2.5kW
Power	120 VAC, 50 / 60Hz 48 - 100 VDC Bearingless, brushless, direct drive ± 3% voltage, .2% frequency (ac unit) < 5% THD (ac unit) 1.8v peak-to-peak max. ripple (dc unit)
Noise / EMI	Metal isolation compartment eliminates EMI / RFI
Safety	Short and open circuit protection, lightning surge suppression
Fuel	Natural gas 800 - 1,200 BTU/scf Consumption - 44scf/hr at full load LPG (Propane) - 2520 BTU/scf Consumption - 0.5 gal/hr at full load
Enclosure	Rugged 3/16" aluminum structure with 1/8" aluminum skin. Fully coated inside and out, top coat of polyurethane enamel. Locking panels, louvers and screens on all openings. Weather, insect, and vandal resistant
Weight	Operational approx. 238 kg (525 lbs)
Size	Length = 104 cm (41"), Width = 104 cm (41") Height = 89 cm (35")
Noise	Maximum 65 dB @ 7 meters
Environment	7 - 43°C @ 3,000 meters, 100% relative humidity 20 - 110°F @ 10,000 ft., 100% relative humidity

Benefits:

- Long-Life Prime Power
- Low Maintenance
- Superior Reliability
- High Quality Power @ 120/240 VAC or 48VDC
- Universal Application

Dimensions


REDHAWK ENERGY SYSTEMS, LLC
10340 PALMER RD., S.W.
PATASKALA, OH 43062

PH: (740) 964-4000
FX: (740) 927-6017

Website: www.redhawkenergy.net
Email: info@redhawkenergy.net