

**Date:** February 15, 2018

**To:** Lake County Electric Supply  
65 Soda Bay Road  
Lakeport, CA 95453  
Ph:707-570-5203

**Attn:** Thomas Powers  
[Thomas.Powers@LCESI.com](mailto:Thomas.Powers@LCESI.com)

**ITEM A –** Quantity 1 - Generac® Industrial diesel engine-driven generator set with turbocharged 4-cylinder 3.4L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- **35 kW Rating, wired for 120/240 VAC three phase, 60 Hz**
- Brushless Excitation
- **Standard Weather Protective Enclosure, Steel**
  - Industrial Grey Baked-On Powder Coat Finish
- UL2200
- EPA Certified
- SCAQMD
- H-100 Control Panel
  - Meets NFPA 99 and 110 requirements
  - Temp Range -40 to 70 degrees C
  - Digital Microprocessor:
    - Two 4-line x 20 displays, full system status
    - 3 Phase sensing, +/-0.25% digital voltage regulation
    - RS232, RS485 and Canbus remote ports
    - Waterproof connections
    - All engine sensors are 4-20ma for minimal interference
    - Programmable I/O
    - Built-in PLC for special applications
  - Engine function monitoring and control:
    - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
    - Isochronous Governor, +/-0.25% frequency regulation
    - Full system status on all AC output and engine function parameters
    - Service reminders, trending, fault history (alarm log)
    - I2T function for full generator protection
    - Selectable low-speed exercise
  - HTS transfer switch function monitoring and control
  - 2-wire start controls for any 2-wire transfer switch
- Standard MLCB, 80% rated thermal-magnetic
  - 125 Amp
- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- 110 AH, 925 CCA Group 31 Battery, with rack, installed
- Coolant Heater, 1500W, 120VAC
- 24" 132 Gallon Double-Wall UL142 Basetank
  - Mechanical fuel level indicator gauge
  - Electronic fuel level sender
  - Emergency Vent
- 3 Owner's Manuals
- 120V GFCI and 240V Outlet
- Engine Run Relay

- Standard 2-Year Limited Warranty
- SD0035JG163.4D18HBYY3

**Freight, Labor – other non-taxable items**

- 2 Year limited warranty
- Freight – all items FOB Job site – off loading by others
- Field start-up and testing conducted by a factory certified technician.
- Start-up to be conducted using building load.
- Start-up and testing is limited to (1) day on site, performed during normal business hours Monday thru Friday, excluding holidays.
- Unless specifically stated in our proposal, on-site training will be conducted the same day as start-up.
- For systems testing, we require free, clear, unimpeded access to the generator, ATS, and switchgear.
- Fuel and Taxes are not included in the pricing.

**Total Price FOB Jobsite without Tax.....\$25,025.00**

**NOTES & ADDERS:**

**120/240V Three phase system**

**Diesel Fuel is required**

**No specification or drawings provided.**

\* Optional 5 Gal. spill containment & vents for base tank, if required  
**Add \$3,175.00 (Advance notification required prior to final order)**

\* Optional pressure test of tank "at site", if required **ADD \$1,500.00**  
**(Tank needs to be empty of diesel fuel prior to pressure test)**

- Specification and drawings provided - section dated revision - Drawing have been included only
  - Cross referenced sections not specifically provided and/or clarified in writing are not included
  - Equipment will be supplied as submitted
  - There will be variations in the equipment from the "concept" contract documents. It is not the responsibility of Energy Systems to design, engineer or to provide construction coordination with other trades.
- Submittal Request: lead-time – 2-3 weeks from receipt of "purchase order" depending on level of project complexity
  - "Hold for approval" – no equipment will be ordered without written release to proceed
  - "For record" – all equipment will be immediately ordered and released for production based on our quoted BOM
- Delivery: Delivery of equipment is on the order of 6-8 weeks from receipt of approved submittals and receipt of complete and necessary technical information; subject to factory workload at time of order
- Written release required prior to production.
- Terms and conditions described in any purchase order and/or contract are incorporated only to the extent that such are consistent with the terms and conditions attached.
- Not included: Exhaust System Backpressure Test, Exhaust Emissions Test, Infrared Scanning, NETA testing, Harmonic Testing, Arc Flash studies, Concrete pad, Off-loading, Anchoring, Installation, Fuel Pipe, Fuel, Exhaust pipe, Pipe insulation, Signage or Permits
- Not included: any required stairs/ platforms required to gain access/ entry into the enclosure, nor to maintain any NEC clearances as it relates to circuit breaker handle height
- Factory witness testing is not included; but can be provided upon request.

- Generator breakers rated for maximum output of generator

## *Terms and Conditions*

### *Not Included*

- Installation: Items noted are “shipped loose” for contractor installation including any required interconnecting piping or to customer connection points.
- Fuel - No fuel is included in this proposal.
- Permits: Any and all permit applications or costs including but not limited to local City, County, State and AQMD. Energy Systems will provide information as requested for use with permit application but assumes no responsibility or obligation to apply for or obtain subject permits unless specifically included in our proposal. Energy Systems has provided equipment that to the best of our knowledge complies with all local, state and federal requirements.
- Emission permitting and compliance testing and related costs. To the best of our knowledge this equipment meets all current emission standards for PM and NOx. A permit to operate this engine may require a “Risk Screen Analysis” to determine maximum cancer risk at the final installation site. Results of this test may require the addition of exhaust after-treatment devices. This equipment is not included unless specifically called out in our bill of material.
- Testing: Any and all associated testing, inspection, equipment, and certifications requested or required to be performed by a third party including circuit breaker coordination, system commissioning or building load testing. Building commissioning exercises typically involve concurrent integrated mechanical, electrical and control systems testing. Our participation in these events can only be quoted separately on a time and material basis.
- IBC seismic certifications are not included unless called out in our bill of material
- Selective Breaker Coordination NEC700, 701 – Customer must provide a copy of the coordination study listing the manufacture’s part number of the disconnect device to be supplied with the generator, a revised quote will be issued to supply this alternate device(s).
- Additional items that may be required by local utility for interconnection and parallel operation
- Electrical, Mechanical, Civil, and Structural professionally engineering services
- Engineering services other than supply of Factory standard drawings, equipment cut-sheets and controls per quoted scope of supply
- Startup and Commissioning service charges other than as noted in the quoted scope of supply. Additional field or shop labor including travel costs to/from the jobsite will be quoted and charged separately at time of requested services.
- Balance of plant equipment, controls, and monitoring except as quoted

### *Commercial Terms and Conditions*

- Terms and Conditions described in any Purchase Order or Contract are incorporated only to the extent that such are consistent with the terms and conditions hereof.
- Taxes: are not shown or included but will be added as necessary
- Validity: Above quote valid for 60 days
- Price: Escalation charges may apply to orders awaiting release of “hold for approval” submittals longer than 90 days
- Cancellation: Charges of 10% after accepted order, tiered escalation to 50% 4 weeks prior to factory ship date, 90% thereafter
- Freight: FOB jobsite - off loading, storage and protection of this equipment at the jobsite is not included. Equipment cannot be stored by Energy System or its suppliers without prior arrangement. Seller’s responsibility for shipments cease upon delivery to the Transportation Company. Any claims for shortages, delays or damages occurring thereafter shall be made directly by the purchaser to the transportation company. Any claims against the seller for shortages in shipments shall be made within Ten (10) days of receipt of shipment.
- Warranty: Standard manufacturer’s warranty applies to the above listed equipment. Extended warranty service contracts may be available and are listed above if included.
- Acceptance: Once accepted this order shall become a binding contract but is subject to strikes, lockouts, accidents, fire, delays in manufacture or transportation, acts of God, embargoes, or government actions. These causes beyond the control of the seller shall absolutely absolve the seller from any liability to the purchaser under the terms hereof.
- Contracts: Penalty or liquidated damages clauses for failure to meet shipping dates are not acceptable or binding on Energy Systems.
- Title: It is understood and agreed that title to and possession of subject equipment shall remain vested in seller until all obligations and payments due from purchaser to seller have been paid in full.



**Date:** September 21, 2018

**To:** *Maxwell Beard*

Utility Billing Specialist II

Lake County Special Districts

Email: [maxwell.beard@lakecountycyca.gov](mailto:maxwell.beard@lakecountycyca.gov)

Telephone (707) 263-0119

Direct Line (707) 263-0149

Fax (707) 263-3836

**Reference:** NW LS3 Park

Energy Systems is pleased to offer the following proposal for the above listed project, and based on the below Bill of Materials.

**ITEM A –** Quantity 1 - Generac® Industrial diesel engine-driven generator set with turbocharged 4-cylinder 3.4L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- **35 kW Rating, wired for 120/240 VAC three phase, 60 Hz**
- Permanent Magnet Excitation
- **Level 1 Acoustic Enclosure, Steel**
  - Industrial Grey Baked-On Powder Coat Finish
- UL2200
- EPA Certified
- SCAQMD
- H-100 Control Panel
  - Meets NFPA 99 and 110 requirements
  - Temp Range -40 to 70 degrees C
  - Digital Microprocessor:
    - Two 4-line x 20 displays, full system status
    - 3 Phase sensing, +/-0.25% digital voltage regulation
    - RS232, RS485 and Canbus remote ports
    - Waterproof connections
    - All engine sensors are 4-20ma for minimal interference
    - Programmable I/O
    - Built-in PLC for special applications
  - Engine function monitoring and control:
    - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
    - Isochronous Governor, +/-0.25% frequency regulation
    - Full system status on all AC output and engine function parameters
    - Service reminders, trending, fault history (alarm log)
    - I2T function for full generator protection
    - Selectable low-speed exercise
  - HTS transfer switch function monitoring and control
  - 2-wire start controls for any 2-wire transfer switch
- Standard MLCB, 80% rated thermal-magnetic
  - 125 Amp

- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- 110 AH, 925 CCA Group 31 Battery, with rack, installed
- Coolant Heater, 1500W, 120VAC
- **24" 190 Gallon Double-Wall UL142 Basetank**
  - External fill and vent
  - Mechanical fuel level indicator gauge
  - Electronic fuel level sender
  - Emergency Vent
  - Overfill Prevention Valve
- Remote E-Stop - Break Glass
- 3 Owner's Manuals
- 120V GFCI and 240V Outlet
- Engine Run Relay
- Standard 2-Year Limited Warranty
- SD0035JG163.4D18HPSY3

**ITEM B –** Quantity 1 - Generac® HTS Series Automatic Transfer Switch consisting of the following features and accessories:

- **100 Amp, 3 Pole, 120/240 VAC three phase**, 60 Hz, with RS-485 communications link to generator set-mounted controller for switch operation
- Double set of Auxiliary Contacts
- UL1008 Listed, CSA Certified
- **NEMA 3R Enclosure**
- Std set of 3 Manuals
- 2-Year Basic Warranty
- HTS010W-3JNNNYCN

**Freight, Labor – other non-taxable items**

- 2 Year Limited warranty
- Freight – all items FOB Job site – off loading by others
- Field start-up and testing conducted by a factory certified technician.
- Start-up to be conducted using bldg. loads.
- Start-up and testing is limited to (1) day on site, performed during normal business hours Monday thru Friday, excluding holidays.
- Unless specifically stated in our proposal, on-site training will be conducted the same day as start-up.
- For systems testing, we require free, clear, unimpeded access to the generator, ATS, and switchgear.
- Fuel and Taxes are not included in the pricing.

**Total Price FOB Jobsite without Tax.....\$29,248.00**

Optional Adders- (if required)

1. 5-Gal Spill Containment ..... \$ 500.00
2. 12 Ft Tank Vent Extension ..... \$ 800.00
3. On-Site Tank Testing.....\$ 1,200.00
4. Level 2 Sound Enclosure.....\$ 1200.00
5. Remote Annunciator..... \$ 600.00
6. Air Board permitting (Authority to Construct) ..... \$2,890.00
  - a. If within 1,000 feet of school (K-12) Additional fees of \$2,000.00 per school

**Notes**

Estimated Delivery Lead Time: 10-12 weeks  
Estimated Submittal Lead time: 1-2 weeks  
Fuel and Taxes are not included in the above pricing, unless otherwise stated above

**Terms and Conditions**

1. ES West Coast LLC - Energy Systems is a MATERIAL SUPPLIER only.
2. All prices are FOB job site. Off-loading and placement of equipment is by others.
3. Price quoted is valid for 45 days and subject to reconfirmation.
4. Energy Systems terms are payment in full prior to shipment unless credit is approved.
5. Credit is subject to approval by Energy Systems upon receipt of completed Energy Systems business credit application, signed terms and conditions, and prelim notice information (forms available from ES Sales or our website [www.espowergen.com](http://www.espowergen.com)).
6. With approved credit all products are invoiced from date of shipment and are payable Net 30 days.
7. 1.5% per month finance charge will apply on past due accounts - annual rate of 18%.
8. Manufacturer lead time to be confirmed upon approved release for production letter and receipt of ES approved PO/order.
9. Equipment cannot be held by Energy Systems or its suppliers without prior arrangement.
10. Any orders changed or canceled after 14 days from confirmation of order will be subject to change or cancellation fees.
11. No taxes, permits, fuel (and/or fuel for testing) or license fees are included in this quotation. All permits and/or licenses are by others unless specified otherwise in this quote.
12. All other standard Energy Systems terms & conditions apply.
13. Terms and conditions described in any purchase order and/or contract are incorporated only to the extent that such are consistent with the terms and conditions hereof.

**Sincerely,**

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Vivian Hoang  
Sales  
Energy Sys West Coast  
209-870-1900  
[vhoang@espowergen.com](mailto:vhoang@espowergen.com)

**Acceptance of Quote**

Purchase orders for equipment or services on this quotation indicates acceptance of the conditions of sale listed above.

Please return a signed copy of this quote as acknowledgement of receipt.

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Print Name

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Sign Name Date

**Customer Signature**

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September 26, 2018  
Lake County Special Districts Administration  
230A Main Street  
Lakeport Ca, 94543  
Attn: Maxwell Beard

We at Industrial Electrical Company are pleased to offer you a quote for an Emergency Standby Generator per the spec provided. Freight to Lakeport Ca is included in Quote. **Tax is Not Included in Quote.**

Qty (1) Kohler **40REOZK** diesel powered stationary generator set, rated for 41kw, .8PF, 50KVA, 120/240, 3 phase, 4 wire, 60hz, 1800RPM, in a outdoor rated weatherproof enclosure with a 142 gallon subbase diesel fuel tank rate for 24 hours at full load (see pre-submittal package for further details)..... **\$24,915.00**

Qty (1) Kohler **45REOZT4** diesel powered towable generator set, rated for standby duty at 40kw, .8PF, 45KVA, 120/240, 3 phase, 4 wire, 60hz, 1800RPM, in a outdoor rated weatherproof sound attenuated enclosure with 130 gallon subbase diesel fuel tank rated for 24 hours at full load (see pre-submittal package for further details)..... **\$29,850.00**

**Startup Includes:** Install 12-Volt Battery (**Supplied by Mfg**), Inspect Generator and Transfer Switch (**if applicable**), perform building load test with available building load at time of startup (**customer responsible to provide fuel, cable and connection to building, resistive load bank testing can be provided additional to pricing provided**), Program Transfer Switch as needed (**if applicable**). Perform 1hr Training to available personnel at time start-up is performed.

Start-Up..... **\$1,200.00**

**Exclusions from this quote:**

- Quote based on specifications supplied 9/20/18
- Built-in PLC for special applications is excluded
- Fuel is not included
- Offloading by Others
- Sizing Provided by Others
- All applicable permits and fees Not Included
- Any and All Installation
- Tax is Not Included

**Quote valid for 60 days**

**Best regards,**

*Rich Hodge*  
**Industrial Electrical Company**  
**Service Manager**  
**PH: (209) 422-6075**  
**FX: (209) 527-8095**



**Cell: (209) 652-8282**  
**[rhodge@iecmail.com](mailto:rhodge@iecmail.com)**



# NEVADA

## ENERGY SYSTEMS

**YOUR POWER SYSTEMS SPECIALISTS**

February 17, 2018

P.O. Box 10083 Reno, NV 89510-0083 TEL (775) 331-4151 FAX (775) 331-4977  
1395 Spice Island, Sparks, NV 89431 email sales@nevadaenergysystems.com

LAKE COUNTY SPECIAL DISTRICTS

Attn: John Sparkes

John.sparkes@lakecountyca.gov

Subject: 125KW Standby Generator

Dear John:

We are pleased to submit our quotation to provide the following equipment:

One (1) GILLETTE Generator Model SPJD1250-3-4 JOHN DEERE DIESEL engine generator set rated 125KW 480 Volt, three phase, 60 HZ., 1800 RPM (to pick up 2 ea. 47 HP pumps) complete with all standard equipment and including the following accessories:

- 130 Degree rise PMG generator
- Electronic governor
- Jacket water heater with isolation ball valves with shore power plug
- Oil and coolant drain extension
- Battery, rack and cables
- 6 Amp float battery charger with battery kill switch
- NFPA110 digital controller with display of engine safeties, gauges and metering with communications.
- Exhaust silencer, stainless steel flexible exhaust connection & rain cap installed within the enclosure.
- 24 hr. (206)gal. base mounted, UL listed, double walled fuel tank with low / high fuel level alarm.
- 200 Amp mainline circuit breaker with shunt trip and auxiliary contacts
- 2 year warranty
- Level II Sound attenuated weather protective enclosure painted beige
- Isolators
- 2 year warranty
- Factory testing
- Initial start up and testing @ jobsite
- (1) O&M manual
- 200 Amp Appleton Receptacle to match customer's Appleton plug.

TOTAL NET PRICE FOR JOBSITE.....\$39,978.00

Terms: Net 15 days. Sales tax is not included and shall be added if applicable. Delivery is running approx. 8-10 weeks at this time.

We appreciate this opportunity to submit our quotation for your consideration, and look forward to working with you.

Sincerely,  
NEVADA ENERGY SYSTEMS, INC

*Sandy Todaro*  
Sandy Todaro





# GILLETTE GENERATORS

60 HZ MODEL  
**SPJD-1250**

**LIQUID COOLED DIESEL ENGINE GENERATOR SET**

Model	HZ	STANDBY 130°C RISE
	60	125
<b>SPJD-1250-60 HERTZ</b>		



All generator sets are USA prototype built and thoroughly tested. Production models are USA factory built and 100% load tested.



**UL2200, UL1446, UL508, UL142, UL498**



**NFPA 110, 99, 70, 37**

All generator sets meet NFPA-110 Level 1, when equipped with the necessary accessories and installed per NFPA standards.



**NEC 700, 701, 702, 708**



**NEMA ICS10, MG1, ICS6, AB1**



**ANSI C62.41, 27, 59, 32, 480, 40Q, 81U, 360-05**

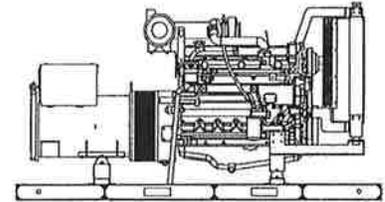


**ASCE 7-05 & 7-10**

All generator sets meet 180 MPH rating.

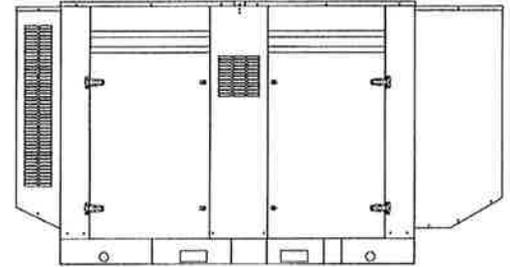


**EPA 40CFR Part 60, 1048, 1054, 1065, 1068**



**"OPEN" GEN-SET**

There is no enclosure, so gen-set must be placed within a weather protected area, uninhabited by humans or animals, with proper ventilation. Silencer not supplied, as installation requirements are not known. However, this item is available as optional equipment.



**"LEVEL 2" HOUSED GEN-SET**

Full aluminum weather protection and superior sound attenuation for specific low noise applications. Critical grade muffler is standard.

**GENERATOR RATINGS**

GENERATOR MODEL	VOLTAGE		PH	HZ	130°C RISE STANDBY RATING		POWER LEAD CONNECTIONS
	L-N	L-L			KW/KVA	AMP	
SPJD-1250-1-1	120	240	1	60	125/125	521	4 LEAD DEDICATED 1 PH
SPJD-1250-3-2	120	208	3	60	125/156	434	12 LEAD LOW WYE
SPJD-1250-3-3	120	240	3	60	125/156	376	12 LEAD HIGH DELTA
SPJD-1250-3-4	277	480	3	60	125/156	188	12 LEAD HIGH WYE
SPJD-1250-3-5	127	220	3	60	125/156	411	12 LEAD LOW WYE
SPJD-1250-3-16	346	600	3	60	125/156	150	4 LEAD DEDICATED 3 PH

RATINGS: All single phase gen-sets are dedicated 4 lead windings, rated at unity (1.0) power factor. All three phase gen-sets are 12 lead windings, rated at .8 power factor. 130° C "STANDBY RATINGS" are strictly for gen-sets that are used for back-up emergency power to a failed normal utility power source. This standby rating allows varying loads, with no overload capability, for the entire duration of utility power outage. All gen-set power ratings are based on temperature rise measured by resistance method as defined by MIL-STD 705C and IEEE STD 115, METHOD 6.4.4. All generators have class H (180°C) insulation system on both rotor and stator windings. All factory tests and KW/KVA charts shown above are based 130°C (standby) R/R winding temperature, within a maximum 40°C ambient condition. Generators operated at standby power ratings must not exceed the temperature rise limitation for class H insulation system, as specified in NEMA MGI-22.40. Specifications & ratings are subject to change without prior notice.

# APPLICATION AND ENGINEERING DATA FOR MODEL SPJD-1250-60 HZ

## GENERATOR SPECIFICATIONS

Manufacturer..... Marathon Electric Generators  
 Model & Type..... 431PSL6224 4 Pole, 4 Lead, Single Phase  
 .....363PSL1607 4 Pole, 12 Lead re-connectable, Three Phase  
 .....363PSL1658, 4 Pole, 4 Lead, 600 V, Three Phase  
 Exciter..... Brushless, shunt excited  
 Voltage Regulator..... Solid State, HZ/Volts  
 Voltage Regulation..... ½%, No load to full load  
 Frequency..... Field convertible, 60 HZ to 50 HZ  
 Frequency Regulation..... ± ½% ( 1/2 cycle, no load to full load)  
 Unbalanced Load Capability..... 100% of standby amps  
 Total Stator and Load Insulation..... Class H, 180°C  
 Temperature Rise..... 130°C R/R, standby rating @ 40°C amb.  
 1 Ø Motor Starting @ 30% Voltage Dip (240V)..... 190 kVA  
 3 Ø Motor Starting @ 30% Voltage Dip (208-240V)..... 250 kVA  
 3 Ø Motor Starting @ 30% Voltage Dip (480V-600V)..... 340 kVA  
 Bearing..... 1, Pre-lubed and sealed  
 Coupling..... Direct flexible disc.  
 Total Harmonic Distortion..... Max 3½% (MIL-STD705B)  
 Telephone Interference Factor..... Max 50 (NEMA MG1-22)  
 Deviation Factor..... Max 5% (MIL-STD 405B)  
 Ltd. Warranty Period..... 24 Months from date of start-up or  
 ..... 1000 hours use, first to occur.

## GENERATOR FEATURES

- World Renown Marathon Electric Generator having UL-1446 certification.
- Full generator protection with Deep Sea 7420 controller, having UL-508 certification.
- Automatic voltage regulator with over-excitation, under-frequency compensation, under-speed protection, and EMI filtering. Entire solid-state board is encapsulated for moisture protection.
- Generator power ratings are based on temperature rise, measured by resistance method, as defined in MIL-STD 705C and IEEE STD 115, Method 6.4.4.
- Power ratings will not exceed temperature rise limitation for class H insulation as per NEMA MG1-22.40.
- Insulation resistance to ground, exceeds 1.5 meg-ohm.
- Stator receives 2000 V. hi-potential test on main windings, and rotor windings receive a 1500 V. hi-potential test, as per MIL-STD 705B.
- Full amortisseur windings with UL-1446 certification.
- Complete engine-generator torsional acceptance, confirmed during initial prototype testing.
- Full load testing on all engine-generator sets, before shipping.
- Self ventilating and drip-proof & revolving field design

## ENGINE SPECIFICATIONS AND APPLICATIONS DATA

### ENGINE

Manufacturer..... John Deere  
 Model and Type..... 4045HF485, 4 cycle, liquid Cooled  
 Aspiration..... Turbocharged  
 Charged Air Cooling System..... Air to Air  
 Cylinder Arrangement..... 4 Cylinders, In-Line  
 Displacement Cu. In. (Liters)..... 275 (4.5)  
 Bore & Stroke In. (Cm.)..... 4.19 x 5.00 (10.6 x 12.7)  
 Compression Ratio..... 17.0:1  
 Main Bearings & Style..... Tin-Aluminum, Babbitt  
 Cylinder Head..... Cast Iron  
 Pistons..... 4, Aluminum Alloy  
 Crankshaft..... Forged Chrome Steel  
 Exhaust Valve..... Forged Heat Resistant Steel  
 Governor..... JDEC Electronic L16 DENSO HP3  
 Frequency Regulation..... ± 1/4%  
 Air Cleaner..... Dry, Replaceable Cartridge  
 Engine Speed..... 1800 rpm  
 Max Power, bhp (kwm) Standby..... 197 (147)  
 BMEP: psi (kpa) Standby..... 252 (1735)  
 Ltd. Warranty Period..... 24 months or 2000 hrs, first to occur

### FUEL SYSTEM

Type..... Diesel Fuel Oil (ASTM No. 2-D)  
 Combustion System..... Direct Injection  
 Fuel Injection Pump..... Stanadyne Rotary Type  
 12 VDC Air Intake Heaters..... Standard Equipment  
 Oil Filter and Water Separator..... Yes

### FUEL CONSUMPTION

GAL/HR (LITER/HR)	STANDBY
100% LOAD	9.9 (37.3)
75% LOAD	7.6 (28.9)
50% LOAD	5.6 (21.1)

### OIL SYSTEM

Type..... Full Pressure  
 Oil Pan Capacity qt. (L)..... 13.7 (13.0)  
 Oil Pan Cap. W/ filter qt. (L)..... 14.7 (13.9)  
 Oil Filter..... 1, Replaceable Spin-On

### ELECTRICAL SYSTEM

Ignition System..... Electronic  
 Eng. Alternator/Starter: 12 VDC, Negative ground, 65 Amp/hr.  
 Recommended Battery to -18°C (0°F):... 12 VDC, Size BC1# 27,  
 Max Dimensions: ..... 12" lg X 6 3/4" wi X 9" hi, with standard  
 round posts. Min output at 700 CCA. Battery tray (max. dim. at  
 12"lg x 7"wi), hold down straps, battery cables, and battery  
 charger, is furnished. Installation of (1) starting battery is  
 required, with possible higher AMP/HR rating, as described  
 above, if normal environment averages -13°F (-25°C) or cooler.

### CERTIFICATION

All engines are CARB and EPA emissions certified. All  
 stationary diesel engines are Tier III compliant.

# APPLICATION AND ENGINEERING DATA FOR MODEL SPJD-1250-60 HZ

## COOLING SYSTEM

Type of System .....	Air to Air, Charged Air Cooling
Coolant Pump .....	Pre-lubricated, self-sealing
Cooling Fan Type (no. of blades) .....	Pusher (7)
Fan Diameter inches (cm) .....	24" (60.9)
Ambient Capacity of Radiator °F (°C).....	122 (50.0)
Engine Jacket Coolant Capacity Qt. (L) .....	9.0 (8.50)
Radiator Coolant Capacity Qt. (L) .....	22 (20.4)
Water Pump Capacity gpm (L/min).....	48 (180)
Heat Rejection Coolant ; Btu/min (kw) .....	4098 (72.0)
Air to Air Heat Reject(kw) .....	1508 (26.5)
Low Radiator Coolant Level Shutdown.....	Standard

Note: Coolant temp. shut-down switch setting at 212°F (100°C) with 50/50 (water/antifreeze) mix.

## COOLING AIR REQUIREMENTS

Combustion Air cfm (m <sup>3</sup> /min) .....	341 (9.65)
Max Air Intake Restrictions:	
Clean Air Cleaner, H <sub>2</sub> O (kpa).....	15 (3.75)
Intake Manifold Pressure, Psi (kpa).....	21 (143)
Max. Allowable Temp. Rise, Amb.	
Air to Engine Inlet, °F (°C) .....	15 (8)
Max. Temp. Out of Charge Air Cooler .....	
@ 77° F (25°C), Amb. Air, °F (°C) .....	140 (60)
Radiator Cooling Air, SCFM (m <sup>3</sup> /min).....	8000 (226.5)

## EXHAUST SYSTEM

Muffler Inlet – Outlet Size – Dual Muffler System .....	3.5"
Max. Back Pressure in H <sub>2</sub> O (kpa).....	30 (7.5)
Exhaust Flow, at rated KW, cfm (m <sup>3</sup> /min) ..	953 (27.0)
Exhaust Temp, at rated KW, °F (°C). .....	1076 (580)

## SOUND LEVELS MEASURED IN dB(A)

	Open Set	Level 2 Encl.
Level 2, Critical Silencer .....	81	75
Level 3, Hospital Silencer.....		70

Note: Open sets (no enclosure) have silencer system choices due to unknown job-site applications. Level 2 enclosure has installed critical silencer with upgrade to Level 3 hospital silencer. Sound tests are averaged from several test points and taken at 23 ft. (7 m) from source of noise at normal operation.

## DERATE GENERATOR FOR ALTITUDE

3% per 1000 ft. (305 m) above 3000 ft. (914 m) from sea level.

## DERATE GENERATOR FOR TEMPERATURE

2% per 10°F (5.6°C) above 104°F (40°C)

## DIMENSIONS AND WEIGHTS

	Open Set	Level 2 Enclosure
Length in (cm).....	98 (249)	134 (339)
Width in (cm).....	48 (122)	48 (122)
Height in (cm).....	55 (140)	71 (181)
1 Ø Net Weight lbs (kg).....	2884 (1308)	3844 (1744)
1 Ø Ship Weight lbs (kg) .....	3134 (1422)	4164 (1889)
3 Ø Net Weight lbs (kg).....	2757 (1251)	3717 (1686)
3 Ø Ship Weight lbs (kg) .....	3007 (1364)	4037 (1831)

# DEEP SEA 7420 DIGITAL MICROPROCESSOR CONTROLLER

## Deep Sea 7420



The "7420" controller is an auto start mains (utility) failure module for single gen-set applications. This controller includes a backlit LCD display which continuously displays the status of the engine and generator at all times.

The "7420" controller will also monitor speed, frequency, voltage, current, oil pressure, coolant temp., and fuel levels. These modules have been designed to display warning and shut down status. It also includes: (11) configurable inputs • (8) configurable outputs • voltage monitoring • mains (utility) failure detection • (250) event logs • configurable timers • automatic shutdown or warning during fault detection • remote start (on load) • engine preheat • advanced metering capability • hour meter • text LCD displays • protected solid state outputs • test buttons for: stop/reset • manual mode • auto mode • lamp test • start button • power monitoring (kWh, kVAr, kVAh, kVArh)

This controller includes expansion features including RS232, RS484 (using MODBUS-RTU/TCP), direct USB connection with PC, expansion optioned using DSENet for remote annunciation and remote relay interfacing for a distance of up to 3300FT. The controller software is freely downloadable from the internet and allows monitoring with direct USB cable, LAN, or by internet via the built in web interface.



Further expansion is available by adding the optional "WebNet" gateway interface module. This device will allow comprehensive monitoring of the generator via the cloud including identification, location, and status. Some advantages of this module include: reduced site visits and maintenance costs • remote fuel management • fault analysis • asset tracking • automatic system alerts • maximized system up-time.

# STANDARD FEATURES FOR MODEL SPJD-1250-60 HZ

## STANDARD FEATURES

### CONTROL PANEL:

- Deep Sea 7420 digital microprocessor with logic allows programming in the field. Controller has:
- STOP-MANUAL-AUTO modes and automatic engine shutdowns, signaled by full text LCD indicators:
  - Low oil pressure
  - High engine temp
  - Low Radiator Level
  - Three auxiliary alarms
  - Battery fail alarm
  - Engine fail to start
  - Engine over speed
  - Engine under speed
  - Over & under voltage
- Also included is tamper-proof engine hour meter

### ENGINE:

- Full flow oil filter • Air filter • Oil pump • Solenoid type starter motor • Hi-temp radiator • Jacket water pump
- Thermostat • Pusher fan and guard • Exhaust manifold
  - 12 VDC battery charging alternator • Flexible exhaust connector • "Isochronous" duty, electronic governor • Vibration isolators • Closed coolant recovery system with 50/50 water to anti-freeze mixture • flexible oil & radiator drain hose.

### AC GENERATOR SYSTEM:

- AC generator • Shunt excited • Brushless design • Circuit Breaker installed and wired to gen-set • Direct connection to engine with flex disc • Class H, 180°C insulation • Self ventilated • Drip proof construction • UL Certified

### VOLTAGE REGULATOR:

- ½% Voltage regulation • EMI filter • Under-speed protection • Over-excitation protection • total encapsulation

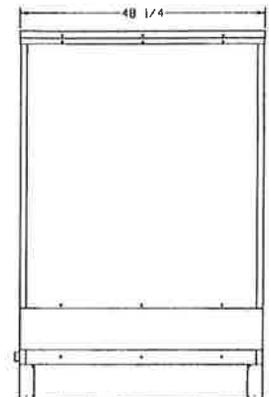
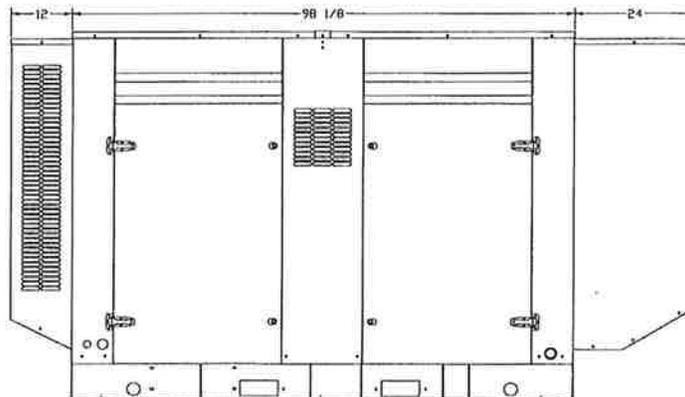
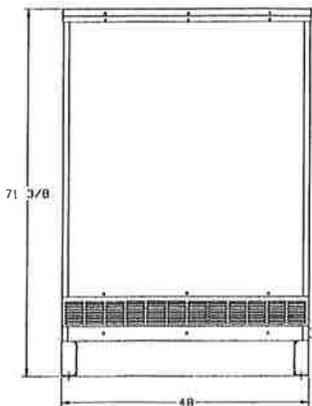
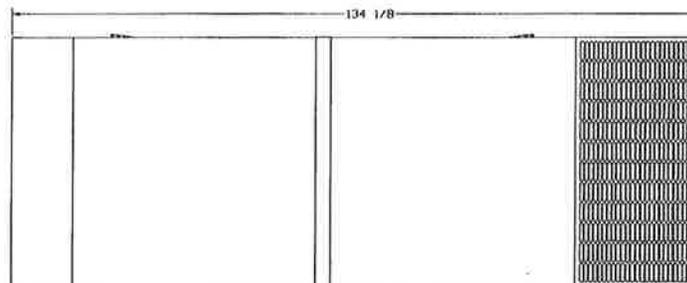
### DC ELECTRICAL SYSTEM:

- Battery tray • Battery cables • Battery hold down straps
- 2-stage battery float charger with maintaining & recharging automatic charge stages

### WEATHER/SOUND PROOF ALUMINUM HOUSING CORROSION RESISTANT PROTECTION CONSISTING OF:

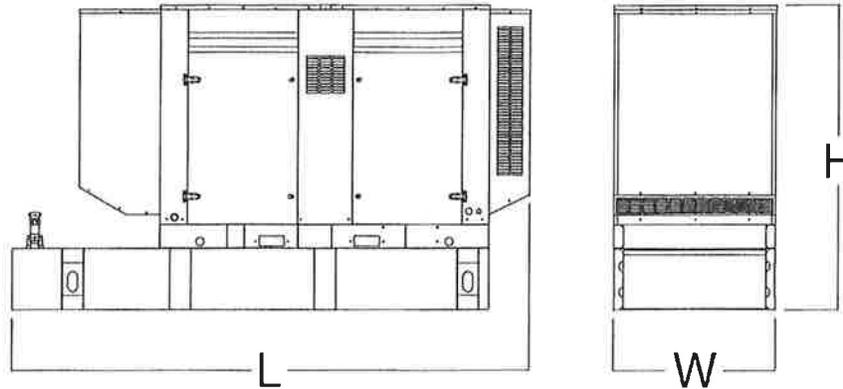
- 9 Heated And Agitated Wash Stages
- Zinc Phosphate Etching-coating Stage
- Final Baked On Enamel Powder Coat
- 18/8 Stainless Steel Hardware

Design & specifications subject to change without prior notice. Dimensions shown are approximate. Contact Gillette for certified drawings.  
DO NOT USE DIMENSIONS FOR INSTALLATION PURPOSES.



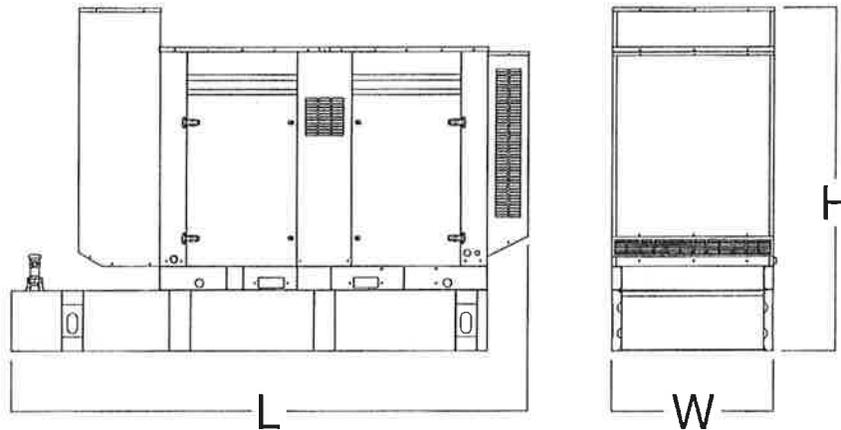
# SPJD-1250 GEN-SET MOUNTED ON DOUBLE WALL SUB-BASE TANK

## SPJD-1250 LEVEL 2 ENCLOSURE



RUN TIME HOURS	USABLE CAPACITY		L	W	H	WT.
	GAL.	LTR.				
NO TANK	-	-	146	48	71	4019
24	206	779	166	48	84	5052
48	413	1561	166	48	93	5361
72	619	2340	188	48	98	5713
96	893	3380	262	48	98	7519

## SPJD-1250 LEVEL 3 ENCLOSURE



RUN TIME HOURS	USABLE CAPACITY		L	W	H	WT.
	GAL.	LTR.				
NO TANK	-	-	146	48	71	4264
24	206	779	166	48	84	5297
48	413	1561	166	48	93	5606
72	619	2340	188	48	98	5958
96	893	3380	262	48	98	7764