

# HDPLN30

## Home Diesel Power Series Gen Set

### Stand-by Specification Sheet

Stand by Rating - 30KW (37KVA)

60HZ



## Standard Features

- 4 Cylinder Diesel Engine for maximum durability, reliability and efficiency.
- Brushless alternator provides uninterrupted power with almost zero maintenance.
- Deep Sea 7220 AMF Digital Controller provides user friendly control over generator and easy to read monitoring of engine, alternator and mains (utility) information.
- 200amp Automatic Transfer Switch (ATS) gives customer touch free load transfer from mains to generator when the power goes out.
- Sound and weather enclosure shelters your investment from the elements while keeping the sound to a minimum.
- 100 gallon base fuel tank keeps your generator running throughout the outage.
- EPA Tier 4 Compliant keeps the atmosphere clean.
- Oil pan and water jacket heaters are standard.
- Delivered fully ready to perform with batteries, oil and coolant. All you have to is have your electrician hook it up.



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## LION Series Gen Set

### SPECIFICATIONS

#### Engine Specifications

- LN490DZL EPA Tier 4
- 36.8kW /50.05bhp @ 1800 RPM
- 12V Electric start
- Cast iron engine block
- .5 g/hr @ 50% load
- .8 g/hr @ 70% load

ENGINE DATA	
Number of cylinders	4
Bore and Stroke	90x105
Displacement	2.672 Liters
Aspiration	Turbo Charged
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	18:1
Rotation	Anti-Clockwise
Cooling System	Liquid Cooled

#### Alternator Specifications

- Brushless Generating Head
- Single and Three phase options
- Multiple Voltages available
- 4 Pole Connection
- Automatic Voltage Regulator (AVR)

ALTERNATOR DATA	
Model Number	TFDW-30
Rated Power	30KW
Rated Voltage	120/240*
Rated Current	100 amps @ 240V 200 amps @ 120V
Rated Frequency	60HZ
Rated Speed	1800 Rpm
Power Factor	1 for single phase/ .8 lagging for three phase
Phase Connection	Single or Three Phase

Excitation Method	Brushless
Voltage Regulation	AVR
Poles	4(L1,L2,N,G)

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### LION Series Gen Set

Controller

## **DSE 7220 DIGITAL CONTROLLER**

**AUTO MAINS FAILURE MODULE**

The Deep Sea 7220 Auto Mains Failure control module is designed as an auto-start and auto-stop module for single gen set applications. The 7220 controller takes all the electronics out of the generator and crams it all into a user friendly module. This controller handles engine, generator and mains (utility) information as well as the operation of the Automatic Transfer Switch.

## **FEATURES**

- Automatic Switching from Mains (utility) power to generator power upon power outage
- User friendly menus and readings
- Fully configurable via PC software
- Editable from front panel
- Multiple date and time maintenance scheduler
- 16 user configurable exercise timers
- Set it and forget it operation upon completion of setup

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### Transfer Switch



### Automatic Transfer Switch

The Automatic Transfer Switch is the most crucial part for having standby power generation. The ATS is responsible for switching your home from mains (utility) power to generator power when there is a power outage. The ATS is operated and

monitored by the equally critical Deep Sea 7220 AMF module on your generator. The ATS is included with your generator in a wall mount, weather resistant steel cabinet.

### INCLUDED

- 200Amp AUTOMATIC TRANSFER SWITCH
- Wall-mount weather resistant steel cabinet.
- Pre-wired for ease of installation.
- Wiring Diagram to give to your electrician.
- Measurement of box is 20" x 20" x 10"

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Sound and Weather Enclosure



### **SOUND AND WEATHERPROOF ENCLOSURE**

The steel constructed weather and soundproof enclosure is meant to protect your investment from the elements and decrease noise of operation.

### **ENCLOSURE**

- Houses the Deep Sea 7220 Controller as well as the LION LN490DZL diesel engine and the brushless alternator.
- The generator is set on a 50 gallon diesel fuel tank for longer operation.
- Exhaust piping through the roof of the enclosure for ease of extra tubing if generator is placed in a shed or barn.
- Opened grills for efficient airflow.
- Sound Dampening lining to lower noise
- 68dB rating at 7 meters.
- Utility panel for easy hookups.

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## LION Series Gen Set

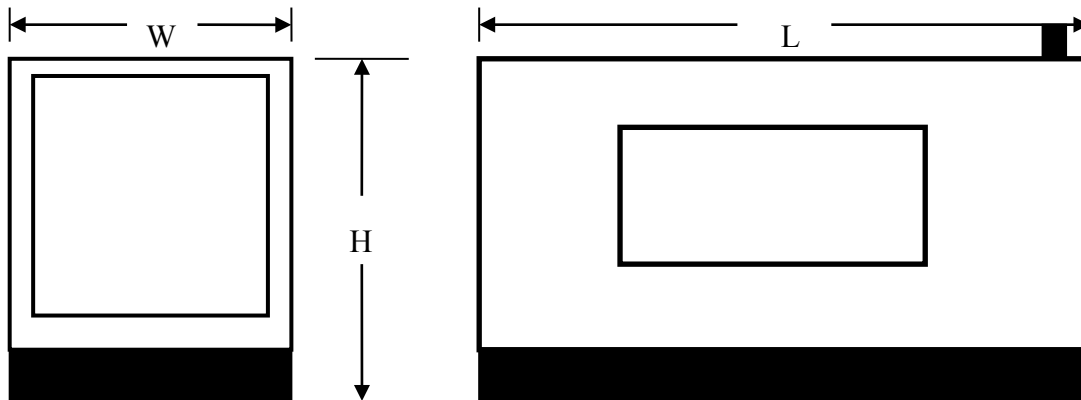
### Utility Panel and Measurements



#### UTILITY PANEL AND HOOKUPS

The utility panel is where your wiring is sent from the generator to the Automatic Transfer Switch. The standard hookup is a 4 pole setup with 4 control wires to hook the Deep Sea Controller to your transfer switch.

- 3 40Amp 240V plugs
- 2 110V Plugs GFCI
- Main Breakers.



<b>Dimensions(LxWxH)*</b>	<b>90</b>	<b>43</b>	<b>51</b>
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\* These dimensions are subject to change. Please consult your sales rep for proper sizing. Proper concrete slab size should be 3 feet large on each size for ease of maintenance.