

# 350kW NG/LP Dual Fuel Mobile Generator Set



## Specifications

Frequency	Voltage	Continuous kW (kVA)	Speed rpm
60 Hz	480/277	350 (437)	1800

PSI Heavy Duty 21.9L Natural Gas/LP Engine	Metric	Imperial (English)
Number of Cylinders	V12	
Type	4 Stroke Cycle	
Bore	128 mm	5.04 in
Stroke	142 mm	5.59 in
Displacement	21.9 L	1338 in <sup>3</sup>
Compression Ratio	10.5	
Engine Speed rpm	1800	
Aspiration	Turbo Charged, Air Cooled	
Fuel	Natural Gas (CNG, LNG), Liquid Propane	
Generator Set Data		
Continuous Rated Power	350 kW	
kVA rating	437 kVA	
Rated power factor	0.8 pf	
Frequency	60 Hz	



## Specifications (continued)

Stamford Alternator	
Frame size	S4L1D-G
Pitch	2/3
No. of Poles	4
Excitation	PMG excited
Constructions	Single bearing
Insulation	UL 1446 Class H
Enclosure	Drip-proof IP23
Temperature rise	105 Degrees C
Alignment	Close coupled
Wave form deviation	Less than 5%
Telephone Influence Factor (TIF)	Less than 50
Harmonic Distortion (THD)	Less than 5%

Performance Specification		
		Units
Engine power	434 (581)	kW (bhp)
BSFC	11.35 (8,028)	MJ/kWh (Btu/bhp-hr)
Induction air flow rate	27 (968)	m <sup>3</sup> /min (ft <sup>3</sup> /min)
Cooling air flow rate	1,133 (40,000)	m <sup>3</sup> /min (ft <sup>3</sup> /min)
Max exhaust stack temperature	732 (1350)	C° (F°)
Exhaust flow rate	273	ft/s
Engine oil system capacity	40 (10.5)	L (gal)
Engine coolant capacity	52 (11)	L (gal)
Radiator coolant capacity	176 (39)	L (gal)
Oil change interval	1100	Hours

## Weight and Dimensions

Model	Length (ft)	Width (ft)	Height (ft)	Weight with Lube oil and Coolant (lbs.)
350kW Mobile Generator	23' 7"	8'	9' 11"	17,060

## Standard Features

### Stamford Alternator

- UL listed S4L1D-G
- Cont. F - 105/40°C Rating
- 510kVA, 408kW, 93.9% Efficiency
- 4-pole, Permanent Magnet Generator (PMG)

### Voltage Regulation

- Field-Proven MX341 base regulation
- 3-phase digital sensing (RMS) and adjustments through bias adjustment from DSE8610 MKII

### Load Sharing

- DSE 8610MKII provides fully automated voltage bias and governor control
- Parallel capable
- High-speed CANBUS load share communications between generators
- Standard kW and kVAR sharing balanced between generators
- Other options included: Fixed Export, Fixed PF control, Power vs Frequency (IEEE 1547 curves), and Reactive Power vs Voltage (IEEE 1547 curves)

### Control Panel

- Onboard Deep Sea 8610 MKII parallel controller
- Idle/rated switch
- 3 Fuel Control Modes: NG, LP, Auto
- Generator protection features: 27, 32 L/R, 37 P, 40, 46, 50 P, 51 P/G, 59, 81 O/R/U
- Metering display: voltage, current frequency, power factor, kW, WHM, and kVAR
- Panel illumination light and emergency stop switch
- Start/stop switch with cool down timer
- RS485, Modbus over ethernet capable

### Sound Attenuated Container

- Temperature controlled enclosure for harsh climates
- Sound attenuated air intake system
- Three lockable doors with panic release
- External hookups for oil and coolant, drain and fill
- Meets 75 dB(A) at 7 meters sound performance
- Full spill containment of onboard engine fluids with easy drain access
- Low-draw LED work-lighting
- Custom paint scheme available

### Distribution Panel

- 480/277V, 3-phase
- Door safety switch for breaker trip
- 690A Camlock per phase, 400A Camlock ground
- 4 conductor terminals, double set-screw 2AWG - 600MCM per phase and ground

### Side Customer Access

- Separate control panel, distribution panel, and circuit access doors
- External emergency stop push button
- Remote start/stop contacts
- Lock out tag out switch

### Telemetry

- Dual-carrier satellite and cellular access



## Standard Features (continued)

### Circuit Breaker

- 600A fixed type, 3 poles, generator set mounted, electrically operated
- 50 kAIC
- Shunt trip

### Current Transformers

- CTs rated 800:5

### Starting System

- Single electric starting motor, 24VDC
- Dual 12V maintenance free batteries with lock out tag out disconnect switch, battery rack, and cables

### Trailer Features

- 2 - 5/16 ball hook up
- 2 - 8,000 lb axle
- 4 - way leveling jacks

### Cooling System

- Provides 49 C° (104 F°) ambient capability at 100% continuous rating before de-rating

### Auxiliary Distribution System

- 120V 20A GFCI power outlet
- Remote start/stop terminals
- 120V battery charger input

### Fuel System

- Natural Gas (CNG, LNG), Liquid Propane
- Onboard LP vaporization and automatic, seamless switch between LP and natural gas under an electrical load
- Stoichiometric air fuel mixture with NSCR catalyst

## Emissions

	PSI Heavy Duty 21.9L Engine (NG)	PSI Heavy Duty 21.9L Engine (LP)
	g/HP-hr	g/HP-hr
CO	0.17	0.251
VOC	0.000	0.035
NOx	0.01	0.024