

MOBILE

### MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4



## **Codes and Standards**

Generac Mobile products are designed to the following standards:



**TIER 4 FINAL EMISSIONS** 

FUEL TANK OPTIONS

UN31A CERTIFIED



UL142, ULC-S601 CERTIFIED

# **Power When and Where You Need It**

Generac Mobile diesel generators are designed and engineered to power a variety of projects, in the most extreme environments. Gensets are configured to meet customer needs, including choice of containment, cold weather packages, trailer options, and more.

Generac Mobile diesel generators are manufactured to deliver reliable power, when and where you need it.

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# **Standard Features**

### ENGINE SYSTEM (2X)

- Perkins<sup>®</sup> 2806F-E18TAG1
- 6 Cylinder
- Turbocharged & After-cooled
- 1,104 in<sup>3</sup> (18.1L) Displacement
- Power @ 1,800 rpm hp (kW):
  - Prime: 670 (500)
  - Standby: 744 (555)
- Paper Element Air Filter
- Electronic Governing
- Variable Speed Fan
- Two Spin On Cartridge Oil Filters
- Oil Drain Extension
- One Fuel / Water Separator
- Two Fuel Filters

### **COOLING SYSTEM (2X)**

- Capable of Operating at 110° F (43° C) Ambient (at Prime)
- 50/50 Coolant (50% Ethylene Glycol)
- Coolant Drain Extension

### FUEL SYSTEM (2X)

- Double Wall Fuel Tank
  - Metal with 110% Containment
  - Contains all Engine Oil, Coolant, DEF
     and Fuel
  - Fuel Detection
  - UN31A Certification
  - UL142/ULC-S601 Certification
- Fuel Tank Capacity US gal (L):
  - Total: 696 (2,634)
  - Usable: 661 (2,502)
- Runtime @ 75% load: 25.8 hrs
- Padlockable Fuel and DEF Tank Caps
- DEF Tank Capacity US gal (L)
  - Total: 28.3 (107.1)
  - Usable: 24.7 (93.5)

### CONTROL SYSTEM (2X)

- Paralleling Capability
  - Deep Sea Electronics<sup>®</sup> 8610 MKII Controller
- 1,600 A Main Circuit Breaker (MCB), Motorized
- Individual Convenience Receptacle Circuit Breakers
- Emergency Stop Switch
- Hour Meter
- Lockable Battery Disconnect
- 2-Position Link Board with Voltage Selection Switch
- Main Control Panel DSE8003 (1X)
  - Controls both units at once to use full
     1,140 kVA in parallel

### **ALTERNATOR SYSTEM (2X)**

- 60 Hz Engine-Driven Alternator
- SuperStart Alternator Leroy Somer LSA 47.2 M8
  - Brushless
  - 4 Pole
  - 2/3 Pitch
  - Class H Insulation
  - Corrosion Protection
- Deep Sea Electronics<sup>®</sup> A109 Digital AVR
- Permanent Magnet Generator (PMG) Excitation System

### **POWER DISTRIBUTION (2X)**

- Convenience Receptacles (2X)
  - Two 120V, 20A, GFCI, Duplex Receptacles (NEMA 5-20R)
  - Three 120/240V, 50A, 3 Pole, 4 Wire Twist Lock Receptacles (CS6369)
- Buck Transformer (2X)
- Main Power Takeoff
  - Camlocks 12 Sets

### **ENCLOSURE (2X)**

- All Steel Construction
- UV and Fade Resistant White Polyester Powder Paint
- 4 Point Lift
- Fully Lockable Enclosure
- Multi Lingual Operating and Safety Decals
- Document Holder with Owner's Manual Includes AC and DC Wiring Diagrams
- Control Panel Lights

### **COLD WEATHER (2X)**

- 2,250 W Engine Block Heater
- Three Heated Fuel Filters
- 1,000 W Oil Heater
- Crankcase Ventilation (CCV) System Heater
- 30A Battery Charger
- Two 1,100 CCA Batteries (12V, Group 4D)
- 60/40 Coolant (60% Ethylene Glycol)

### TRAILER

- 50' Drop Deck Trailer
- Dual 22,500 lb (10,206 kg) Axles
- Air Brakes
- Tires: 11R22.5, 14 ply
- DOT Certified
- Includes Ladder w/Handrail

### CONNECTIVITY

- 2 Years Included
- 4G Modem with Removable SIM Card

### WARRANTY

2 year Limited or 2,000 Hours
Unlimited Hours Covered in First Year

### **RATING DEFINITIONS**

Standby: The maximum power available during a variable electric power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hours of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturer.

Prime: Applies to supplying power to a varying load in lieu of utility for an unlimited amount of running time.

MDE1140

GENERAC<sup>®</sup> MOBILE



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# **Control System**



### **CONTROLLER & DISPLAY**

- Controller: (2) Deep Sea<sup>®</sup> Model DSE8610 MKII
- 4 Line Back Lit LCD Text Display
- -40 to 158° F (-40 to 70° C) Operating Temperature Range
- Multiple Language Options
- Configurable Timers and Alarms
- Configurable Start/Stop Timers
- Configurable Maintenance Alarms

# PUSH BUTTONS FOR EASY OPERATION

- Manual or Auto Start
- Engine Start
- Engine Stop/Reset
- User Friendly Setup and Button Layout
- Five Key Menu Navigation
- Hours Counter
- Multiple Parameters are Monitored and Displayed Simultaneously for Full Visibility
- View Controller Parameters (Configuration, Firmware Version, Connections)

### LCD ALARM INDICATION

- Generator Diagnostic Display
- System kVA Output Display
- Line Output and Frequency Display
- 250 Event History Log Date/Time Stamped
- Alarm Types: Warning, Shutdown, Electrical Trip, Engine Alarm List - Warnings/ Shutdowns:
  - Fuel Level: Warning - 15% Shutdown - 5%
  - Over-speed Protection: Shutdown - 110%
  - Battery Voltage: Over - 30 VDC Under - 18 VDC
  - Generator Over Voltage:
  - Warning 110% Electrical Trip - 115%
  - Generator Under Voltage: Warning - 90% Shutdown - 85%
  - Generator Over Frequency: Warning - 105% Electrical Trip - 110%
  - Generator Under Frequency: Warning - 95%; Electrical Trip - 90%
- Auto Schedule
- Status

### **ELECTRICAL CONTROLS**

- Lockable Control Box Door
- Voltage Adjustment ±10%

GENERAC

### DEEP SEA<sup>®</sup> MODEL DSE8003

- Main Interface with Full Color 7 in Graphical Display
- Paralleling Controller for both MDE570 Gensets in MDE1140

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# MOBILE



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# Application and Engineering Data

### **ENGINE SPECIFICATIONS**

### General

Make (Model)	Perkins (2806F-E18TAG1)
EPA Emissions Compliance	Tier 4 Final
After-Treatment System	EGR, DOC, SCR, & DPF
Cylinders – Qty	6
Туре	In-Line
Displacement – in <sup>3</sup> (L)	1,104 (18.1)
Bore – in (mm)	5.7 (145)
Stroke – in (mm)	7.2 (183)
Compression Ratio	16.0:1
Intake Air Method	Turbocharged & After-cooled
Engine Governing	
Governor	Electronic
Frequency Regulation (Steady State)	0.75%

### **Engine Electrical System**

System Voltage – VDC	24
Battery – CCA	1,100
Battery – V (Qty)	12 (2)
Ground Polarity	Negative (-)

### **Lubrication System**

Oil Pump Type	Gear
Oil Filter Type	Spin-On Cartridge
Crankcase Capacity – qt (L)	78.2 (74)

### **Cooling System**

Cooling System Type	Water Cooled
Water Pump Type	Engine Gear Driven
Fan Type	Pusher
Fan Speed – rpm	Variable Speed Clutch
Fan Diameter – in (mm)	46 (1,168)
Coolant System Capacity – US gal (L)	16.7 (63.2)

### **Fuel System**

Fuel Type	Ultra Low Sulfur Diesel
Fuel Specifications	ASTM D975 D2
Fuel Filtering – $\mu$	Primary: 10 Final: 4
Fuel Pump Type	Engine Gear Driven Lift Pump
Injector Type	Electronically Controlled Unit Injector (MEUI)

### **ALTERNATOR SPECIFICATIONS**

### SuperStart Alternator Specifications

Make (Model)	Leroy Somer (LSA 47.2 M8)
Poles – Qty	4
Field Type	Revolving
Insulation Class – Rotor	Н
Insulation Class – Stator	Н
Total Harmonic Distortion	<2%
Telephone Interference Factor	<50

Standard Excitation	PMG
Bearings	1
Coupling	14
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	1
Regulation Accuracy (Steady State)	0.50%





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# **Operating Data**

### POWER RATINGS (2X)

	SUPERSTART Alternator	
	Standby: kW/kVA (A)	Prime: kW/kVA (A)
3-phase, 208/120 VAC @ 0.8 pf—low wye	460/575 (1,598)	456/570 (1,584)
3-phase, 240/139 VAC @ 0.8 pf—low wye	500/625 (1,505)	456/570 (1,372)
3-phase, 480/277 VAC @ 0.8 pf—high wye	500/625 (753)	456/570 (686)
3-phase, 600/346 VAC @ 0.8 pf—high wye	NA	NA

### FUEL AND DEF CONSUMPTION RATES (2X)

Prime Load	Fuel: US gph (L/hr)	DEF: US gph (L/hr)
25%	11.2 (42.3)	0.4 (1.3)
50%	18.0 (68.3)	0.6 (2.2)
75%	25.6 (96.7)	0.9 (3.3)
100%	33.5 (126.8)	1.2 (4.4)
110% (Standby)	36.5 (138.3)	1.3 (5.1)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Mobile Authorized Service Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, SAE J1228, SAE J1995, and DIN6271 standards.



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# **Dimensions and Weights\***



\*Runtime based on 75% of prime rated power. All measurements are approximate and for estimation purposes only.

# **Sound Rating**

• 78 dB(A) @ 23 ft (7 m) & 75% PRP

YOUR FACTORY RECOGNIZED GENERAC MOBILE DEALER

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