

MDE570P | 18.1 L | 570 kVA

MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4

GENERAC® | **MOBILE**

Standby Power Rating

500 kW, 625 kVA, 60 Hz

Prime Power Rating

456 kW, 570 kVA, 60 Hz



Image used for illustration purposes only



*Assembled in the USA using domestic and foreign parts

Codes and Standards

Generac Mobile products are designed to the following standards:



CSA CERTIFIED



NATM



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.

STANDARD FEATURES

ENGINE SYSTEM

- Perkins® 2806F-E18TAG1
- 6 Cylinder
- Turbocharged & Aftercooled
- 1,104 in³ (18.1 L) 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
- Engine Fluid (Oil, Coolant, & DEF) Containment
 - 110% Containment
 - Engine Fluid Detection
- Two 12 V, 950 CCA, Wet Cell Batteries

COOLING SYSTEM

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

FUEL SYSTEM

- Single Wall Fuel Tank
 - UN31A Certification
- Fuel Tank Capacity – gal (L):
 - Total: 760 (2,876)
 - Usable: 671 (2,540)
- Runtime @ 75% load: 27.1 hr

- DEF Tank Capacity – gal (L):
 - Total: 28.3 (107.1)
 - Usable: 24.7 (93.5)
- Padlockable Fuel & DEF Tank Caps

CONTROL SYSTEM

- Deep Sea Electronics® 8610 MKII Controller (Non-Paralleling)
- 1,600 A Main Circuit Breaker (MCB), Manual
- Individual Convenience Receptacle Circuit Breakers
- Emergency Stop Switch
- Hour Meter
- Lockable Battery Disconnect
- 2-Position Linkboard with Voltage Selection Switch

ALTERNATOR SYSTEM

- 60 Hz Engine-Driven Alternator
- Standard Alternator Leroy Somer™ LSA 47.2 M7
 - Brushless
 - 4 Pole
 - 2/3 Pitch
 - Class H Insulation
 - Corrosion Protection
- Deep Sea Electronics® A109 Digital AVR
- Permanent Magnet Generator (PMG) Excitation System

POWER DISTRIBUTION

- Connection Lugs
- Convenience Receptacles
 - Two 120 V, 20 A, GFCI, Duplex Receptacles (NEMA 5-20R)

- Three 120/240 V, 50 A, 3 Pole, 4 Wire Twist-lock Receptacles (CS6369)
- Buck Transformer

ENCLOSURE

- All Steel Construction
- UV and Fade Resistant White Polyester Powder Paint
- Central Lifting Point
- 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

TRAILER

- Electric Brakes
- 3 in. (76.2 mm) Pintle Ring
- Three 10,000 lb (4,535 kg) Axles
- 17.5 in. Tires, Tubeless, 10 ply
- Heavy Duty Trailer Jack
- Safety Chains with Spring Loaded Safety Hooks
- Transportation Tie Downs
- Plug Adapter, Round 7 Spade (SAE J2863)
- DOT Approved Tail, Side, Brake, and Directional Lights

WARRANTY

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

CONTROL SYSTEM



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- Configurable Maintenance Alarms
- Heated Display

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
- Alarm Types: Warning, Shutdown, Electrical Trip, Engine
- Alarm List – Warnings/Shutdowns; 250 Event History Log – Date/Time Stamped

- Fuel Level: Warning – 15%; Shutdown – 5%
- Overspeed Protection: Shutdown – 110%
- Engine Diagnostic Warnings Communicated Through J1939 CANbus
- 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%

CONTROLLER AND DISPLAY

- Controller: Deep Sea® 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 OPTIONS*

ENGINE SYSTEM

- Positive Air Shutdown (PAS), Electronic
- Engine Oil Level Maintainer

COLD WEATHER

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

FUEL SYSTEM

- Double Wall Fuel Tank
 - 110% Containment
 - Fuel Detection
 - UN31A Certification
 - UL142 / ULC-S601 Certification
- Fuel Tank Capacity - gal (L)
 - Total: 696 (2,634)
 - Usable: 661 (2,502)
- Runtime @ 75% Load: 26.8 hr
- Auxiliary Fuel Tank Connection
 - Integrated, In-Unit Fuel Pump
 - Quick-connect Fitting for External Auxiliary Fuel Tank

CONTROL SYSTEM

- Paralleling Capability
 - Deep Sea Electronics 8610 MKII Controller (Paralleling)
 - 1,600 A Main Circuit Breaker (MCB), Motorized
 - Mobile Switching Center (MSC) Cable Connections
- Telemetry

- LoJack Equipment Recovery System

ALTERNATOR SYSTEM

- SUPERSTART®
- VFLEX (600 V)

POWER DISTRIBUTION

- Camlocks—Six Sets, Female (US or Canada Color Code)

ENCLOSURE

- Interior Enclosure Lights
- 5 Lb Fire Extinguisher

TRAILER

- Skidded (Non-trailer)ed
- Rear Jack Group
- Toolbox—Aluminum, 49×15×18.5 in (125×38×47 cm)
- One Spare Tire
- Two Spare Tires

RATING DEFINITIONS

Standby: Applies to varying emergency load for the duration of a utility power outage.

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

*Consult Generac for availability

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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
Type	In-Line
Displacement – in ³ (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 & Aftercooled

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	0.75%

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 – gal (L)	16.7 (63.2)

Fuel System

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

Engine Electrical System

System Voltage – VDC	24
Battery – CCA	950
Battery – V (Qty)	12 (2)
Ground Polarity	Negative (-)

STANDARD ALTERNATOR SPECIFICATIONS

Make (Model)	Leroy Somer (LSA 47.2 M7)
Poles – Qty	4
Field Type	Revolving
Insulation Class – Rotor	H
Insulation Class – Stator	H
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	3
Regulation Accuracy (Steady State)	0.50%

SUPERSTART ALTERNATOR SPECIFICATIONS

Make (Model)	Leroy Somer (LSA 47.2 M8)
Poles – Qty	4
Field Type	Revolving
Insulation Class – Rotor	H
Insulation Class – Stator	H
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	3
Regulation Accuracy (Steady State)	0.50%

APPLICATION AND ENGINEERING DATA (CONTINUED)

VFLEX ALTERNATOR SPECIFICATIONS

Make (Model)	Leroy Somer (LSA 47.2 L9)	Standard Excitation	PMG
Poles – Qty	4	Bearings	1
Field Type	Revolving	Coupling	14
Insulation Class – Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class – Stator	H	Voltage Regulator Type	Digital
Total Harmonic Distortion	<2%	Number of Sensed Phases	3
Telephone Interference Factor	<50	Regulation Accuracy (Steady State)	0.50%

OPERATING DATA

POWER RATINGS

	Standard Alternator		SUPERSTART Alternator		VFLEX Alternator	
	Standby: kW/kVA (A)	Prime: kW/kVA (A)	Standby: kW/kVA (A)	Prime: kW/kVA (A)	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)	460/575 (1,598)	456/570 (1,584)	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)	500/625 (1,505)	456/570 (1,372)	500/625 (1,505)	456/570 (1,372)
3-phase, 480/277 VAC @ 0.8 pf-high wye	500/625 (753)	456/570 (686)	500/625 (753)	456/570 (686)	500/625 (753)	456/570 (686)
3-phase, 600/346 VAC @ 0.8 pf-high wye	NA	NA	NA	NA	500/625 (602)	456/570 (549)

FUEL AND DEF CONSUMPTION RATES

Prime Load	Fuel: gph (L/hr)	DEF: gph (L/hr)
25%	10.1 (38.3)	0.4 (1.3)
50%	16.8 (63.3)	0.6 (2.2)
75%	24.7 (93.5)	0.9 (3.3)
100%	33.0 (124.9)	1.2 (4.4)
110% (Standby)	38.3 (145.0)	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, ISO8528, ISO 8665, ISO 3046 SAE J1228, SAE J1995, and DIN6271 standards.

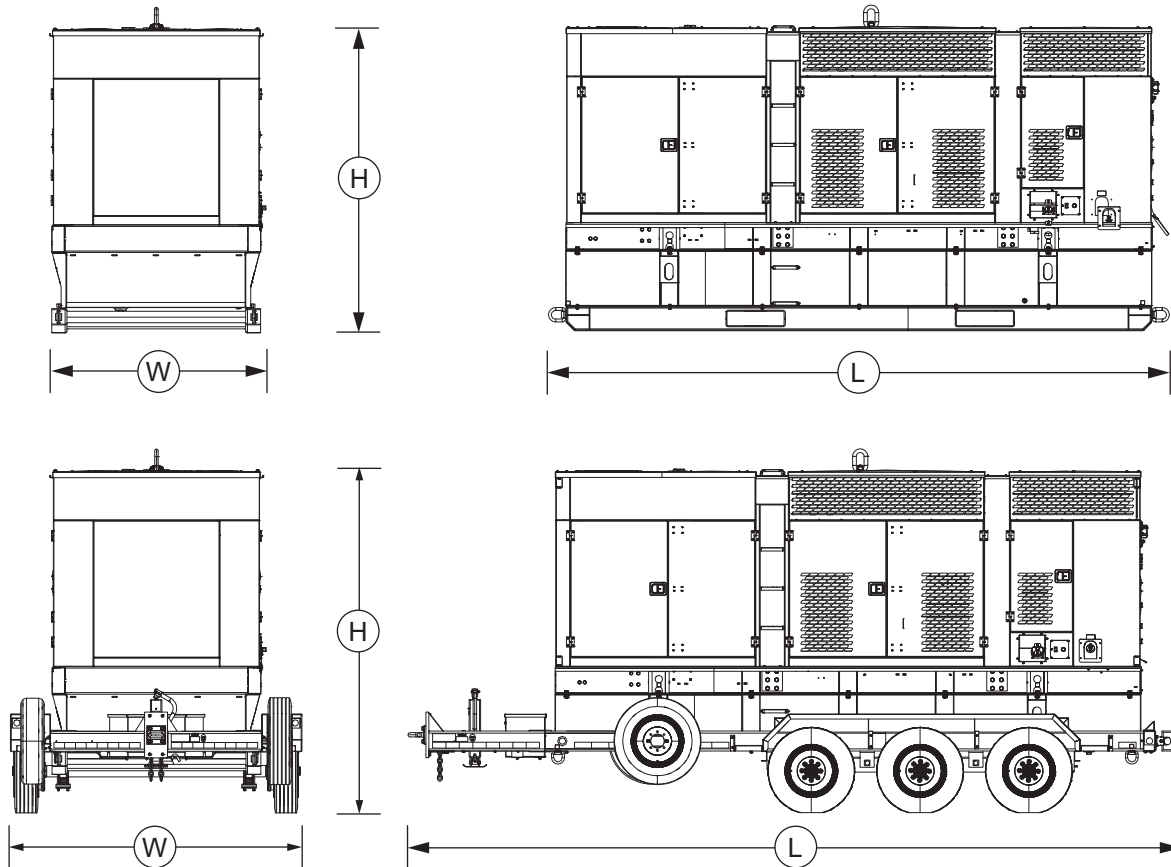
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DIMENSIONS AND WEIGHTS*



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	Run Time: hr*	Usable Fuel Capacity: gal (L)	Dimensions – L×W×H: in (m)	Weight: lb (kg)
Skid	27.1	671 (2,540)	204.8 (5.2)×73.0 (1.9)×109.0 (2.8)	Dry: 17,482 (7,928) Operating: 23,375 (10,600)
Trailer	27.1	671 (2,540)	260.0 (6.6)×102.0 (2.6)×118.8 (3.0)	Dry: 19,951 (9,048) Operating: 25,844 (11,720)

*Runtime based on 75% of prime rated power.

SOUND RATING

- 75 dB(A) @ 23 ft (7 m) & 75% PRP

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC MOBILE DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Mobile Authorized Service Dealer for detailed installation drawings.