

D530 Mobile Generator Set

Non-Certified • Less Regulated Countries (LRC)



Image shown may not reflect actual configuration.

60 Hz • 1800 RPM
Standby 585 kW | 731 kVA
Prime 530 kW | 664 kVA

50 Hz • 1500 RPM
Standby 484 kW | 605 kVA
Prime 440 kW | 550 kVA

U.S. EPA
 National Security Exemption
 Option for U.S. Government Use

Specifications (on JP8 Fuel)

Generator	Frequency	Voltage	Standby kW (kVA)	Prime kW (kVA)	Phase	Amp (A)*
Standard	60 Hz	480/277V	585 (731)	530 (664)	3-phase	880.59
	60 Hz	240/139V	585 (731)	530 (664)	3-phase	1761.19
	60 Hz	208/120V	504 (630)	475 (594)	3-phase	1750.77
	50 Hz	415/240V	484 (605)	440 (550)	3-phase	842.67
	50 Hz	400/230V	484 (605)	440 (550)	3-phase	874.27
	50 Hz	380/220V	460 (575)	418 (523)	3-phase	874.65

*Standby - full load current.

Generator	Metric	Imperial
Dry Weight	11.3398 MT	25,000 lb

Cat® C18 Diesel Engine	Metric	Imperial (English)
Configuration	I-6, 4-Stroke-Cycle Water Cooled Diesel	
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1106.4 in ³
Aspiration	Turbocharged-Aftercooled	
Compression Ratio	14:1	
Engine rpm	1800/1500	
Fuel System	MEUI	
Governor Type	ADEM™ A4	
Fuel	Any Diesel Fuel	

Benefits & Features

Fuel Strategy

- U.S. EPA National Security Exemption to allow operation on any Diesel fuel (ULSD, JP8, F-24, Jet-A, F-76, Marine Diesel)

Product Details

- Meets ISO 8528 transient response
- Package is factory designed and production tested
- Manufactured in ISO 9001:2000 facility
- USA Design, Manufactured, and Assembled

Cat C18 ACERT Diesel Engine

- Reliable, rugged, durable design
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight and gradual altitude derate

Cat Generator

- Matched to the performance and output characteristics of Cat engines
- Single point access to accessory connections
- UL 1446 Recognized Class H insulation

SEL-700G Control Panel

- Allows inter-operable paralleling to any genset, inverter, microgrid, or utility interconnect
- Tactical Microgrid Communication & Controls (MIL-STD-3071)

Factory-installed Standard Equipment

Engine

- C18 Fuel Optimized (Low Fuel Consumption)
- Convenient service access for Cat service tools (service tools not included)

Dual Air Inlet

- Heavy-duty air cleaner with precleaner, two-stage cyclonic paper with dust cup and service indicator
- Turbocharger and air-to-air aftercooler

Fuel System

- 700-gal (2650 L) double-wall fuel tank, UL 142 and ULC 601 Listed and complies with Transport Canada requirements, 27-hour runtime @ 75% prime, internal fuel fill when using #2 Diesel
- Fuel cooler
- Switch operated, electric priming pump
- Auxiliary connections for customer-supplied fuel transfer system with 2-way fuel transfer valve
- Primary fuel filters (2) with integral water separator and differential pressure gauge
- Engine-mounted secondary fuel filters
- Able to run on military and aviation fuels such as ULSD, JP8, F-24, Jet-A, F-76, Marine Diesel

Generator

- Three-phase, random wound, coastal insulation protection, 0.6667 pitch, permanent magnet excited, Class H insulation with Class F temperature rise
- Includes one anti-condensation heater (120V, 250W)
- 12-lead design, with voltage changeover link board and frequency selection switch

Charging System

- UL Listed 120V, 20-amp battery charger, shock-mounted and enclosed in dust-proof housing
- Charging alternator; 24V-100A, heavy duty with integral regulator and belt guards
- Solar maintainer for batteries

Lube System

- Pump, integral oil cooler, lube oil, filter, filler and dipstick, and oil sampling valve
- Open crankcase breather with cartridge filter
- Oil drain line with internal brass ball valve routed to connection point accessible from exterior
- 500-hour oil change intervals

Mounting System

- Generator set soft mounted to the heavy duty, fabricated steel base frame
- Steel base frame with tie-down eyes contains integral fuel tank

Starting System

- Single electric starting motor, 24V
- Dual 12V (1400 CCA) maintenance-free batteries with disconnect switch, battery rack, and cables
- UL Listed, 120V single-phase jacket water heater with thermostat and shut-off valves

Containerized Module

- 20' ISO standard cube container
- Sound attenuated air intake louvers and two lockable personnel doors with panic release
- Interior walls and ceilings insulated with 100 mm of acoustic paneling
- Floor of container insulated with acoustic glass and covered with galvanized steel
- Side bus bar access door, external access load connection bus bars
- Shore power connection via distribution block connections for jacket water heater, battery charger, space heaters, generator condensate heaters, and internal duplex service receptacle
- Customer convenience panel with multiple receptacles
- External Emergency Stop pushbuttons (2)
- Duplex service receptacle (1), 120V, connected to shore power with automatic switchover to generator power
- Two internal DC lights with one timer
- Corrosion resistant hardware and hinges
- Exhaust silencer

- Painted standard Cat power module white (optional military exterior paint available)
- Auxiliary connections for customer-supplied fuel transfer system
- Fork lift pockets
- Connection cable storage space in radiator compartment during transport

Shore Power

- One 110V shore power connection for jacket water heater
- One 110V shore power connection for generator, battery charger, and single duplex service receptacle
- Includes controls to de-energize jacket water heaters and generator space heater when the engine is running

Cooling

- Vertically mounted radiator with vertical air discharge from the container
- Coolant drain line with internal valve and low-level shutdown switch
- Coolant sight gauge and low-level shutdown switch
- 50/50 Extended Life Coolant

Standard Features

SEL-700G Local Control Panel

- Generator-mounted SEL-700G and SEL-3505 provides power metering, protective relaying, communications, and engine and generator control and monitoring
- Simple selection of voltage and frequency combination from SEL-700G
- Tactical Microgrid Communication & Controls (TMCC) MIL-STD-3071
- NEMA 12, IP44 dust-proof enclosure
- Convenient service access with RJ485 or SEL-C662 cable
- Free SEL-5030 acSELeator QuickSet Software to Set, Monitor, and Control the SEL-700G
- Integration with the SEL-5703 Synchrowave Monitoring for convenient historical monitoring and diagnosis.

Circuit Breaker

- 2000A fixed type, 3 poles, generator set mounted, electrically operated, insulated case
- Solid state trip unit for overload (time overcurrent) and fault (instantaneous) overcurrent protection
- Includes DC shunt trip coil activated on any monitored engine or electrical fault,
- 100 KA-interrupting capacity at 480 VAC
- Protective features inclusive of SEL-700G: 24, 25, 27, 27G, 32, 40, 43, 46, 47, 50, 51, 51N, 59, 59G, 60FL, 67, 79, 81O/U

Distribution

- Three-phase, plus full rated neutral, bus bars are tin-plated copper with NEMA standard hole pattern for connection of customer load cables and generator cables
- Bus bars are sized for full load capacity of the generator set at 0.8 power factor
- Includes ground bus, tin-plated copper, for connection to the generator frame ground and field ground cable
- Customer convenience panel with multiple output receptacles: 1 – 240V, 50A twist lock, 1 – 240V, 20A twist lock, 2 – 120V, 20A twist lock, 2 – 120V, 20A ground fault interrupters, 2 – 120V, 15A GFCI protected duplex receptacles
- Link board for wye operation Voltage Selection

SEL-700G Engine Operator Interface

- Controls: Remote/Local, Emergency stop, Power/Speed adjust, Cycle crank, VAR/Voltage adjust, Cool-down timer, Hardwired Remote Start/Close & Open/Shutdown
- Generator Monitoring: Power Factor, Volts, Amps, Frequency
- Shutdowns with common engine parameters
- Panel illuminating lights
- Display navigation keys including two shortcut keys for engine parameters or generator parameters