



Cat 3500 offshore generator sets are specifically designed for drilling and production operations offshore. Decades of experience powering offshore vessels and platforms make have evolved into a product that offers proven performance, low emissions, high durability, and low owning and operating costs. Applications for 3500 offshore generator sets include main power, essential services power, and emergency power on-board drilling and production rigs and vessels. Cat generator sets are backed by the worldwide network of Cat dealers ready to support your operation with technical support, service, parts, and warranty. Cat 3512C (HD) offshore generator set. Ratings: 1550-1700 ekW (1938 -2125 kVA) @ 60 Hz (1800 rpm). Meets IMO Tier II emission standards.

Specifications

Engine Specifications		
Minimum Rating	1550 ekW	1938 kV·A
Maximum Rating	1700 ekW	2125 kV·A
Emissions	IMO Tier II	
Displacement	59 l	3574 in ³
Bore	170 mm	6.7 in
Engine Control	ADEM A3	
Stroke	215 mm	8.5 in
Fuel System	EUI	
Weight	14975 kg	33300 lb
Aspiration	Turbocharged-Aftercooled	
Oil Change Interval	1000 h	1000 h

Dimensions		
Width	1825 mm	71.9 in
Length	5448 mm	214.5 in
Height	2313 mm	91 in

Capacity for Liquids		
Cooling System - Engine	157 l	41.5 gal (US)
Lube Oil System - Refill	318 l	84 gal (US)

Benefits and Features

Product Design

Developed specifically to meet the demands of oil and gas applications - Proven reliability and durability - Robust diesel strength design prolongs life and lowers owning and operating costs - Market-leading power density - Designed to perform in oilfield conditions, including high ambient and high altitude applications - Long overhaul life proven in oilfield applications - Core engine components designed for reconditioning and reuse at overhaul

Ease of Installation

Inner-outer base mounting configuration simplifies rig integration - Wide range of attachments enable configuration flexibility - Inner base three-point generator mounting maintains factory alignment - Single lifting point simplifies installation work

Advanced Digital Engine Management

ADEM A3 engine management system provided engine control, monitoring, and protection.

Safety

E-stop pushbutton on instrument panel - Air shutoff and explosion relief valves available - Configurable alarm, derate, and shutdown set points - Extra alarms, inputs, and outputs available

Custom Packaging

For any petroleum application, trust Caterpillar to meet your project needs with custom factory generator sets and mechanical packages. Cat engines, generators, controls, radiators, and transmissions can be custom designed and matched in collaboration with our local dealers to create unique solutions. Custom packages are globally supported and are covered by a one year warranty after startup.

Product Support Offered Through the Global Cat Dealer Network

More than 2,200 dealer outlets- Cat factory-trained dealer technicians service every aspect of your Cat petroleum product- Worldwide parts availability, service, and warranty- Preventive maintenance agreements available for repair before-failure options- S•O•SSM program matches your oil and coolant samples against Caterpillar set standards to determine:• Internal engine component condition• Presence of unwanted fluids• Presence of combustion by-products• Site-specific oil change interval

Over 80 Years of Engine Manufacturing Experience

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products.

Web Site

For all your petroleum power requirements, visit www.catoilandgasinfo.com.

Standard Equipment

AIR INLET SYSTEM

- Corrosion resistant separate circuit aftercooler core, regular duty air cleaners, dual turbochargers

CONTROL SYSTEM

- Caterpillar A-III electronic engine control, Electronic Unit Injection fuel system, rigid wiring harness

COOLING SYSTEM

- Auxiliary fresh water pump, centrifugal non-self-priming auxiliary sea water pump, gear driven centrifugal jacket water pump, expansion tank, engine oil cooler, thermostats and housing

EXHAUST SYSTEM

- Dry gas-tight exhaust manifolds with heat shields, dual turbochargers with water-cooled bearings and heat shields, vertical exhaust outlet

FLYWHEELS & FLYWHEEL HOUSINGS

- Flywheel, SAE No. 00, 183 teeth Flywheel housing, SAE No. 00

FUEL SYSTEM

- Fuel filter, RH, with service indicators
- Fuel transfer pump
- Electronically Controlled Unit Injectors

INSTRUMENTATION

- Engine mounted instrument panel with four position switch, overspeed shutdown notification light, emergency stop notification light, graphical display unit for analog or digital display of: oil and fuel pressure, oil and fuel filter differential, system DC voltage, exhaust and water temperature, air inlet restriction, service meter, engine speed, fuel consumption (total and instantaneous)

LUBE SYSTEM

- Top mounted crankcase breather, RH oil filter, RH oil filler, gear type oil pump, deep sump oil pan, recommended use of Caterpillar Diesel Engine Oil 10W30 or 15W40

MOUNTING SYSTEM

- Industrial type engine mounting rails)

POWER TAKE-OFFS

- Accessory drive Lower RH, Lower LH Front housing, Two-sided

PROTECTION SYSTEM

- A-III Electronic Monitoring System provides customer programmable engine de-rating strategies to protect against adverse operating conditions
- Emergency stop push button (located in Electronic Instrument Panel) Safety shutoff protection for oil pressure and water temperature, overspeed protection

GENERAL

- Vibration damper and guard Paint, Caterpillar Yellow engine with black rails. Lifting eyes

Optional Equipment

AIR INLET SYSTEM

- Air Cleaner Removal
- Remote Air Inlet Adapters

CHARGING SYSTEM

- Battery Chargers
- Charging Alternators

CONTROL SYSTEM

- Load Sharing module
- Local speed throttle control

COOLING SYSTEM

- Water level switch gauge
- Coolant level sensors
- Connections
- Keel Cooling Conversions
- Radiator cooling conversion
- Heat exchangers
- Auxiliary water pumps
- Sea water pump removal
- Air separator

EXHAUST SYSTEM

- Exhaust outlet

- Flexible fittings
- Elbows
- Flanges
- Flange and exhaust expanders
- Mufflers

FUEL SYSTEM

- Fuel Cooler
- Fuel priming pumps
- Flexible fuel lines
- Rigid Fuel Lines
- Primary fuel filter
- Fuel level switch

GENERATORS AND GENERATOR ATTACHMENTS

- INSTALLED GENERATOR ARRANGEMENTS F/MAR AUX ENGINES
- INSTALLED GENERATOR ARRANGEMENTS F/MAR AUX ENGINES

INSTRUMENTATION

- PL1000T Communication Module
- PL1000E Communication Module
- Customer Interface Box
- Thermocouples
- Remote panel display
- Remote cylinder temperature display

LUBE SYSTEM

- Oil Pan
- Oil pan accessories
- Sump pumps
- Prelubrication Options
- Lubricating oil
- Centrifugal Oil Filter

MOUNTING SYSTEM

- Vibration isolators
- Rails

POWER TAKE-OFFS

- Flywheel guard
- Flexible coupling
- Coupling hub
- Front housing accessories
- Upper left hand front location

- Upper left hand rear location
- Upper right hand front location:
- Upper right hand rear location
- Lower left hand front location
- Front housing accessory drives
- Front power take-offs
- Crankshaft pulleys
- Damper guard removals

PROTECTION SYSTEM

- Air inlet shutoffs
- Switches and contactors
- Explosion relief valve
- Sensors

SPARE PART KITS

- Engine Parts Kits

STARTING SYSTEM

- Starting motors or barring device
- Air starting motors options
- Starting aids
- Battery sets - 24 volt - Dry
- Battery rack

GENERAL

- Tool set
- Caterpillar datalink wire

SVCE TOOLS/SHIP PROT/FACTORY SUPPORT

- Commissioning

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