

Product Specifications For 966 XE



Engine

Engine Power - 1,600 rpm ISO 14396:2002	239 kW
--	--------

Engine Power - 1,600 rpm ISO 14396:2002	325 hp (metric)
--	-----------------

Engine Model	Cat® C9.3B
---------------------	------------

Gross Power - 1,600 rpm SAE J1995:2014	242 kW
---	--------

Gross Power - 1,600 rpm SAE J1995:2014	329 hp (metric)
---	-----------------

Net Power - 1,600 rpm ISO 9249:2007, SAE J1349:2011	222 hp
--	--------

Net Power - 1,600 rpm ISO 9249:2007, SAE J1349:2011	302 hp (metric)
--	-----------------

Engine Torque - 1,200 rpm ISO 14396:2002	1781 N·m
---	----------

Gross Torque - 1,200 rpm SAE J1995:2014	1799 N·m
--	----------

Net Torque - 1,200 rpm ISO 9249:2007, SAE J1349:2011

1662 N·m

Displacement

9.3 l

Emissions

Meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, China Nonroad Stage IV and Japan 2014 emission standards.

Biodiesel Capability

Up to B20¹

Note (1)

The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.

Note (2)

¹Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible* with ULSD blended with the following lower-carbon intensity fuels**up to: 20% biodiesel FAME (fatty acid methyl ester) ***100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details. *While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use. **Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels. ***Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

Displacement

9.3 L

Engine Torque @ 1,200 rpm – ISO 14396:2002

1781 N·m

Gross Torque @ 1,200 rpm – SAE J1995:2014

1799 N·m

Note (3)

Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to: • 20% biodiesel FAME (fatty acid methyl ester)* • 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to- liquid) fuels Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details. * Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

Weights

Operating Weight

23196 kg

Note

Weight based on a machine configuration with Bridgestone 26.5R25 VJT L3 radial tires, full fluids, operator, standard counterweight, ride control, cold start, roading fenders, Product Link™, front manual differential/open rear axles, powertrain guard, secondary steering, sound suppression, and a 4.2 m³ (5.5 yd³) general purpose bucket with BOCE.

Transmission

Forward - 1

6.9 km/h

Forward - 2

13 km/h

Forward - 3

22.7 km/h

Forward - 4

39.5 km/h

Reverse - 1

6.9 km/h

Reverse - 2

13 km/h

Reverse - 3

28.8 km/h

Note

Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 849 mm (33 in) roll radius.

Sound

**Operator Sound Pressure Level -
ISO 6396:2008**

67 dB(A)

Exterior Sound Power Level - ISO 6395:2008	107 dB(A)
--	-----------

Operator Sound Pressure Level - ISO 6396:2008 ¹	67 dB(A)
--	----------

Exterior Sound Power Level - ISO 6395:2008 ²	105 dB(A)
---	-----------

Note (1)	¹ Including countries that adopt the EU and UK Directives.
----------	---

Note (2)	² Exterior Sound Power Level - European Union Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.
----------	--

With Cooling Fan Speed at Maximum Value - Note	Distance of 15 m (49.2 ft), moving forward in second gear ratio.
--	--

Air Conditioning System

Air Conditioning	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. - If equipped with R134a (Global Warming Potential = 1430), the system contains 1.600 kg (3.5 lb) of refrigerant, which has a CO2 equivalent of 2.288 metric tonnes (2.522 tons). - If equipped with R1234yf (Global Warming Potential = 0.501), the system contains 1.389 kg (3.1 lb) of refrigerant, which has a CO2 equivalent of 0.69 metric tonnes (1.10 tons).
------------------	---

Operating Specifications

Static Tipping Load - Full 37° Turn	14849 kg
-------------------------------------	----------

Static Tipping Load - Full 37° Turn - No Tire Deflection	15981 kg
---	----------

Breakout Force	174 kN
----------------	--------

Note (2)	Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.
----------	---

Note (1)	For a machine configuration as defined under “Weight.”
----------	--

Service Refill Capacities

Fuel Tank	303 l
DEF Tank	26 l
Cooling System	66 l
Crankcase	23 l
Transmission	63 l
Differential - Final Drives - Front	57 l
Differential - Final Drives - Rear	57 l
Hydraulic Tank	114 l

Hydraulic System

Implement System - Maximum Operating Pressure	31000 kPa
Hydraulic Cycle Time - Total	9.5 s
Hydraulic Cycle Time - Total	10.1 seconds

Dimensions - Standard Lift

Height - Top of Hood	2850 mm
Height - Top of ROPS	3593 mm
Ground Clearance	424 mm
Wheel Base	3550 mm
Overall Length - Without Bucket	7399 mm
Hinge Pin Height at Carry Height	635 mm

Hinge Pin Height at Maximum Lift	4245 mm
Lift Arm Clearance at Maximum Lift	3687 mm
Rack Back - Maximum Lift	62 °
Rack Back - Carry Height	50 °
Width over Tires (Loaded)	3012 mm
Tread Width	2230 mm
Note	All dimensions are approximate and based on machine equipped with 4.2 m³ (5.5 yd³) general purpose bucket with BOCE and Bridgestone 26.5R25 VJT L3 radial tires.
Rack Back at Ground	40 degrees
Rack Back - Maximum Lift	62 degrees
Rack Back - Carry Height	50 degrees

Dimensions - High Lift

Height - Top of Hood	2850 mm
Height - Top of ROPS	3593 mm
Ground Clearance	424 mm
Wheel Base	3550 mm

Overall Length - Without Bucket	8069 mm
Hinge Pin Height at Carry Height	782 mm
Hinge Pin Height at Maximum Lift	4804 mm
Lift Arm Clearance at Maximum Lift	4183 mm
Rack Back - Maximum Lift	71 °
Rack Back - Carry Height	49 °
Width over Tires (Loaded)	3012 mm
Tread Width	2230 mm
Note	All dimensions are approximate and based on machine equipped with 4.2 m ³ (5.5 yd ³) general purpose bucket with BOCE and Bridgestone 26.5R25 VJT L3 radial tires.
Rack Back - Carry Height	49 degrees
Rack Back - Maximum Lift	71 degrees
Rack Back at Ground	37 degrees

966 XE Standard Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

OPERATOR ENVIRONMENT

Cab, pressurized, sound suppression
Door, remote opening system
EH implement controls, parking brake
Steering, joystick
Seat, suede/cloth, air suspension, heated
Mirrors, heated
Touchscreen display
Keypad, programmable buttons
Air conditioner, heater, defroster (auto temp, fan)
Sun visor, front and rear retractable
Windows, front, laminated

POWERTRAIN

Cat® C9.3B engine
Electric fuel priming pump
Fuel-water separator and secondary fuel filter
Engine, air precleaner
Axles, auto front differential lock
Axles, ecology drains
Transmission, continuously variable
Rimpull control
Throttle lock mode
Hill and speed hold on grades
Service brakes, hydraulic, fully enclosed wet disc, wear indicators
Park brake, caliper on front axles, spring applied-pressure released

ELECTRICAL

Starting and charging system, 24V
Starter, electric, heavy duty
Lights: halogen, 4 work lights, 2 rearview lights
Lights: roading with turn signals

HYDRAULICS

Implement system, load sensing with electro-hydraulic variable displacement piston pump
Steering system, load sensing with dedicated variable displacement piston pump
Ride control, dual accumulators
Oil sampling valves, Cat XT hoses

LINKAGE

Standard lift, Z-bar
Kickouts: lift and tilt

MONITORING SYSTEM

Front dash with analog gauges, LCD display, and warning lights
Primary touchscreen monitor (Cat Payload, quad screens, machine settings and messages)
Maintenance reminders

ONBOARD TECHNOLOGIES

Autodig with auto set tires
Operator ID and machine security
Application profiles
Job aids
Controls help and eOMM (Not available in all languages)
Cat Payload
Key Features Inform
Bucket Carry Display Widget
Remote Flash

SAFETY

Seat belt reminder
2-point seat belt
Rear vision camera
Window cleaning platform, front

966 XE Optional Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

OPERATOR ENVIRONMENT

Footrest
HMU steering wheel
Implement joystick (2V, 3V only)
Entertainment radio (FM, AM, USB, BT)
Entertainment radio (DAB+)
CB radio ready
Seat, leather/cloth, air suspension, heated/cooled
Windows, front, heavy duty
Full cab window guard

POWERTRAIN

Turbine, air precleaner
Radiator, high debris
Cooling fan, reversible
Axles, auto front and rear differential locks
Axles, AOC ready, extreme temperature seals
Axles, oil cooler

ELECTRICAL

Cold start, 120V or 240V
Lights: LED

HYDRAULICS

3rd and 4th auxiliary functions with ride control
Quick coupler control

LINKAGE

High lift, Z-bar

MONITORING SYSTEM

Tire pressure monitor

ONBOARD TECHNOLOGIES

Cat Advanced Payload

Cat Payload for Trade (Available in Europe and Australia. Country certifications vary. Contact your Cat dealer for more information.)

Cat Payload Printer with E-ticket

SAFETY

4-point seat belt (kit)

Rear vision camera, dedicated

Surround vision, dedicated

Window cleaning platform, front

Collision warning system

Collision mitigation system

Reverse strobe lights (Not compatible with roading arrangements)

Warning beacon

Secondary steering system, electrical (Standard where mandated)

Wheel chocks

Remote control

ADDITIONAL EQUIPMENT

Cat Autolube system

Fenders, roading

Guards: powertrain, crankcase, cab, cylinders, rear

Biodegradable hydraulic oil

High-speed oil change system

Rear cab access

Single Life Cutting Edge GET

Toolbox

SPECIAL CONFIGURATIONS

Aggregate handler

Waste and industrial

Forestry

Corrosion resistant