

Product Specifications For 930



Engine

Rated Engine Power - ISO 14396	119 kW
Engine Model	Cat C7.1*
Performance Mode	Automatic
Rated Gross Power - Rated Engine Speed	1800 r/min
Rated Engine Power - ISO 14396 (DIN)	162 mhp
Rated Net Power - SAE J1349 at Minimum Fan Speed	116 kW
Rated Net Power - ISO 9249 at Minimum Fan Speed	116 kW
Rated Net Power - ISO 9249 (DIN) at Minimum Fan Speed	159 mhp
Maximum Gross Torque - Engine Speed	1400 r/min
Maximum Gross Torque - ISO 14396	787 N·m
Maximum Net Torque - SAE J1349	753 N·m
Maximum Net Torque - ISO 9249	761 N·m

Displacement	7.01 l
Bore	105 mm
Stroke	135 mm
Note	*Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
Note (1)	Advertised power is tested per the specified standard in effect at the time of manufacture.
Note (2)	Net power ratings are tested at the reference conditions for the specified standard and denote power available at the flywheel when engine is equipped with alternator, air cleaner, emission components and fan at specified speed.

Weights

Operating Weight	13246 kg
Operating Weight - High Lift	13472 kg

Buckets

Bucket Capacities	1.9-5 m3 (2.5-6.5 yd3)
--------------------------	------------------------

Steering

Steering Cylinder - Bore Diameter	70 mm
Steering Cylinder - Rod Diameter	40 mm
Steering Cylinder - Stroke	438 mm
Maximum Flow - Steering Pump	130 l/min
Maximum Working Pressure - Steering Pump	24130 kPa
Steering Cycle Times (Full Left to Full Right) - Minimum RPM: Pump Flow Limited	2.8 s

Steering Cycle Times (Full Left to Full Right) - Maximum RPM: 90 RPM Steering Wheel Speed

2.4 s

Loader Hydraulic System

Maximum Flow - Implement Pump	190 l/min
Maximum Flow - Implement Pump - 3rd Function Maximum Flow*	190 l/min
Maximum Flow - Implement Pump - 4th Function Maximum Flow*	160 l/min
Maximum Working Pressure - Implement Pump	26000 kPa
Relief Pressure - Tilt Cylinder	28000 kPa
Relief Pressure - Tilt Cylinder - 3rd and 4th Function Maximum Working Pressure	25000 kPa
Relief Pressure - Tilt Cylinder - 3rd and 4th Function Relief Pressure	28000 kPa
Lift Cylinder: Standard Lift Linkage - Bore Diameter	120 mm
Lift Cylinder: Standard Lift Linkage - Rod Diameter	65 mm
Lift Cylinder: Standard Lift Linkage - Stroke	728 mm
Tilt Cylinder: Standard Lift Linkage - Bore Diameter	150 mm
Tilt Cylinder: Standard Lift Linkage - Rod Diameter	90 mm

Tilt Cylinder: Standard Lift Linkage - Stroke	555 mm
Hydraulic Cycle Time - Raise, Ground Level to Maximum Lift	5.1 s
Hydraulic Cycle Time - Dump (at Maximum Lift Height)	1.5 s
Hydraulic Cycle Time - Float Down, Maximum Lift to Ground Level	2.7 s
Hydraulic Cycle Time - Total Cycle Time	9.3 s
Note	*3rd and 4th function flow is fully adjustable from 20% to 100% of maximum flow through the secondary display when equipped.

Service Refill Capacities

Fuel Tank	195 l
Cooling System	32 l
Engine Crankcase	19.5 l
Transmission - Gear Box	8.5 l
Front Axles	26 l
Rear Axles	25 l
Hydraulic System - Including Tank	165 l
Hydraulic Tank	90 l

Transmission

Forward and Reverse - Range 1*	1-13 km/h (0.6-8 mph)
---------------------------------------	-----------------------

Forward and Reverse - Range 2	13 km/h
Forward and Reverse - Range 3	27 km/h
Forward and Reverse - Range 4	40 km/h
Note	*Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display when equipped. Factory default is 7 km/h (4.4 mph).

Tires

Standard Size	20.5 R25, radial (L-3)
Other Choices Include	20.5 R25, radial (L-5), 20.5-25 16 PR (L-3)
Note (1)	Other tire choices are available. Contact your Cat dealer for details.
Note (2)	In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
Note (3)	Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Cab

ROPS	ISO 3471:2008
FOPS	ISO 3449:2005 LEVEL II

Axles

Front	Fixed; Open differential (standard); Locking differential (optional)
Rear	Oscillating ± 11 degrees; Open differential (standard); Limited slip differential (optional)

Air Conditioning System

Air Conditioning The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg (4.2 lb) of refrigerant which has a CO2 equivalent of 2.717 metric tonnes (2.99 tons).

Sound

Operator Sound Pressure (ISO 6396:2008)	68 dB(A)
--	----------

Average Exterior Sound Pressure (ISO 6395:2008)	101 dB(A)
--	-----------

Note (1)	Measurements were conducted with properly installed and maintained cab doors and windows closed.
-----------------	--

Sustainability

Recyclability	95%
----------------------	-----

Dimensions With Bucket - Standard Lift

Height - Ground to Cab**	3340 mm
---------------------------------	---------

Height - Ground to Beacon**	3707 mm
------------------------------------	---------

Height - Ground to Axle Center**	685 mm
---	--------

Height - Ground Clearance**	397 mm
------------------------------------	--------

Length - Overall*	7613 mm
--------------------------	---------

Length - Rear Axle to Bumper	1993 mm
-------------------------------------	---------

Length - Hitch to Front Axle	1500 mm
-------------------------------------	---------

Length - Wheel Base	3000 mm
----------------------------	---------

Clearance - Bucket at 45°*	2761 mm
Clearance - Load over Height**	3331 mm
Clearance - Level Bucket**	3580 mm
Height - Bucket Pin**	3907 mm
Height - Overall**	5239 mm
Reach - Bucket at 45°*	1109 mm
Carry Height - Bucket Pin	410 mm
Dig Depth**	100 mm
Width - Bucket	2550 mm
Width - Tread Center	1930 mm
Turning Radius - Over Bucket	5961 mm
Width - Over Tires	2540 mm
Turning Radius - Outside of Tires	5402 mm
Turning Radius - Inside of Tires	2851 mm
Rack Angle at Full Lift	54 °
Dump Angle at Full Lift	48 °

Rack Angle at Carry	44 °
Departure Angle	33 °
Articulation Angle	40 °
Tipping Load - Straight (ISO 14397-1:2007)*	9737 kg
Tipping Load - Full Turn (ISO 14397-1:2007)*	8634 kg
Breakout*	11970 kg
Operating Weight	13246 kg
Note (1)	*Vary with bucket.
Note (2)	**Vary with tire.
Note (3)	Dimensions listed are for a machine configured with heavy counterweights, Michelin 20.5 R25 (L-3) XHA2 tires, 80 kg (176 lb) operator, and power train guard. Values are listed for a 2.5 m3 (3.2 yd3) pin on, general purpose performance series bucket with bolt-on cutting edge.

Dimensions With Bucket - High Lift

Height - Ground to Cab**	3340 mm
Height - Ground to Beacon**	3707 mm
Height - Ground to Axle Center**	685 mm
Height - Ground Clearance**	397 mm

Length - Overall*	8407 mm
Length - Rear Axle to Bumper	1993 mm
Length - Hitch to Front Axle	1500 mm
Length - Wheel Base	3000 mm
Clearance - Bucket at 45°*	3353 mm
Clearance - Load over Height**	3540 mm
Clearance - Level Bucket**	4173 mm
Height - Bucket Pin**	4500 mm
Height - Overall**	5382 mm
Reach - Bucket at 45°*	1429 mm
Carry Height - Bucket Pin	638 mm
Dig Depth**	135 mm
Width - Bucket	2550 mm
Width - Tread Center	1930 mm
Turning Radius - Over Bucket	6351 mm
Width - Over Tires	2540 mm

Turning Radius - Outside of Tires	5402 mm
Turning Radius - Inside of Tires	2851 mm
Rack Angle at Full Lift	53 °
Dump Angle at Full Lift	47 °
Rack Angle at Carry	50 °
Departure Angle	33 °
Articulation Angle	40 °
Tipping Load - Straight (ISO 14397-1:2007)*	7021 kg
Tipping Load - Full Turn (ISO 14397-1:2007)*	5697 kg
Breakout*	11674 kg
Operating Weight	13472 kg
Note (1)	*Vary with bucket.
Note (2)	**Vary with tire.
Note (3)	Dimensions listed are for a machine configured with heavy counterweights, Michelin 20.5 R25 (L-3) XHA2 tires, 80 kg (176 lb) operator, and power train guard. Values are listed for a 2.5 m3 (3.2 yd3) pin on, general purpose performance series bucket with bolt-on cutting edge.

930 Standard Equipment

NOTE: Not All Features Are Available In All Regions.

OPERATOR ENVIRONMENT

75 mm (3 in) retractable seatbelt
Automatic temperature control
Cab, enclosed ROPS/FOPS pressurized and sound suppressed
Push to Start
8 Inch Touch Screen
Programmable Joystick
Cup holders
External mirrors with lower parabolic
Ground level cab door release
Hydraulic control lockout
Interior cab lighting, door
Lunch box storage
Radio ready speakers
Seat mounted electronic implement controls, adjustable
Sliding glass on side window
Column mounted multi function control lights, wipers, turn signal
Suspension seat, fabric
Tilt steering wheel
Tinted front glass
Wet arm wiper/washer, 2-speed and intermittent, front
Wet arm wiper washer, rear
Mounting Provision
Digital hour meter, odometer and tachometer
Digital ground speedometer and direction indicator
Engine coolant temperature gauge
Fuel and diesel exhaust fluid levels
Hydraulic oil temperature gauge
Fuel and diesel exhaust fluid levels
Hydraulic oil temperature gauge

POWER TRAIN

Cat C7.1 engine
Auto idle shut down feature
Auto Engine RPM
Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
Turbocharged and aftercooled
Filtered crankcase breather
Power Modes (standard and performance)
Dry type air cleaner
Coolant protection to -34 °C (-29 °F)
Fuel priming pump, automatic
Fuel water separator
Axle seal guards
Enclosed wet disc full hydraulic brakes
Parking brake, electric

Lubed for life driveshafts
Hydrostatic transmission with electronic control
Operator modes (TC, Hystat, Single Pedal and Ice)
Directional shift aggressiveness (fast, medium, slow)
Auto Wheel Torque control, adjust wheel torque
Creeper control, adjust ground speed
Single plane cooling package, wide 6 fins per inch density
Hydraulically driven demand cooling fan
Scheduled Oil Sampling (S·O·SSM) port, engine, coolant, transmission

HYDRAULICS

Automatic lift and bucket kickouts, adjustable in-cab
Bucket and fork modes, adjustable in-cab
Cylinder damping at kickout and mechanical end stops
Fine mode control (fast, medium, slow)
Hydraulic response setting (fast, medium, slow)
Hydraulic diagnostic connectors and S·O·S ports
Hydraulic sight gauge, visible
Load sensing hydraulics and steering
Seat mounted hydraulic joystick controls

ELECTRICAL

Alternator, 115-amp, heavy duty
12V power supply in cab (2)
Batteries, 1,000 CCA (2) 24-volt system, disconnect switch
Back up alarm
Emergency shutdown switch
LED rear stop and turn lights
Heavy duty gear reduction starter
Product Link™
Remote jump start post
Resettable main and critical function breakers
Roading lights front and rear

OTHER

Large-access enclosure doors with adjustable close/open force
Parallel lift loader linkage
Recovery hitch with pin
Remote mounted lubrication points
Lockable compartments

930 Optional Equipment

NOTE: Not All Features Are Available In All Regions.

OPERATOR ENVIRONMENT

Joystick steering – 25 mph (40 kph) capable

Radio packages

Telescoping Steering Column

Deluxe seat – fully adjustable fabric air suspension seat with mid seat backrest

Premium seat – fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Seat is heated and ventilated on bottom cushion and backrest.

Rear Object Detection

Multi View Camera

Front View Camera, roof mounted

Heated external Mirrors (2)

Electrically adjustable and heated external mirrors (2)

Internal Mirrors (2)

Sunscreen, front and rear

Operator Not Present system

Powered precleaned for cab air

Cab guarding

POWER TRAIN

Differential, limited slip, rear

Differential lock in front axle

Powertrain Guarding

Range of Tire Options

Fenders (extended cover and full coverage)

HYDRAULICS

Auxiliary flow, third and fourth function

Connect Under Pressure Disconnects

Ride Control System, adjustable via display

Autolube, integrated in display

Debris packages (low, medium, high)

ELECTRICAL

Cold start package

Ether starting aid, block heater and additional batteries, 1,000 CCA (4 total)

Lights, auxiliary, halogen or LED with engine compartment lights

Beacon light, strobe

Light Guarding

OTHER OPTIONAL EQUIPMENT

Coupler (Fusion)

Heavy Counterweight

Cat Payload Printer

Cylinder Guarding

Range of Work Tool Attachments