

# PRODUCT SPECIFICATIONS FOR 930M



## ENGINE

**Maximum Gross Power** 168 HP

**Rated Net Power - 1,600 rpm - SAE J1349 at Minimum Fan Speed (Standard Power Mode:Range 1-3\*)** 156 HP

**Maximum Net Torque - SAE J1349 (PerformancePower Mode:Range 1-4)** 588 ft·lbf

**Maximum Gross Power - 1,800 rpm - ISO 14396 (DIN) (Performance Power Mode:Range 1-4)** 170 mhp

**Maximum Gross Power - 1,800 rpm - ISO 14396 (PerformancePower Mode:Range 1-4)** 168 HP

**Displacement(PerformancePower Mode:SpeedRange 1-4)** 427 in<sup>3</sup>

**Note (2)** \*Range 4 power and torque is equal to Performance Mode with Caterpillar Power by Range technology.

**Maximum Gross Torque - ISO 14396 (PerformancePower Mode:Range 1-4)** 601 ft·lbf

**Rated Net Power - 1,600 rpm - ISO 9249 (DIN) at Minimum Fan Speed (Standard Power Mode:Range 1-3\*)** 158 mhp

**Note (1)** Net power ratings are tested at the reference conditions for the specified standard and denote power available at the flywheel when the engine is equipped with alternator, air cleaner, emission components and fan at specified speed.

**Maximum Gross Power - 1,600 rpm  
- ISO 14396 (Standard Power Mode:  
Range 1-3\*)** 160 HP

**Engine Model** Cat C7.1\*\*

**Displacement(Standard Power  
Mode:Speed Range 1-3\*)** 427 in<sup>3</sup>

**Maximum Net Torque - SAE J1349  
(Standard Power Mode:Range 1-3\*)** 573 ft·lbf

**Rated Net Power - 1,800 rpm - SAE  
J1349 at Minimum Fan Speed  
(Performance Power Mode:Range  
1-4)** 163 HP

**Rated Net Power - 1,800 rpm - ISO  
9249 (DIN) at Minimum Fan Speed  
(Performance Power Mode:Range  
1-4)** 166 mhp

**Maximum Gross Torque - ISO 14396  
(Standard Power Mode:Range 1-3\*)** 586 ft·lbf

**Note (3)** \*\*The Cat C7.1 engine meets Tier 4 Final/Stage V off-highway emission standards.

**Maximum Gross Power - 1,600 rpm  
- ISO 14396 (DIN) (Standard Power  
Mode:Range 1-3\*)** 162 mhp

**Maximum Net Torque - ISO  
9249:2007 (Performance Power  
Mode:Range 1-4)** 587 ft·lbf

**Rated Net Power - 1,800 rpm - ISO  
9249 at Minimum Fan Speed  
(Performance Power Mode:Range  
1-4)** 164 HP

**Maximum Net Torque - ISO 9249:2007 (Standard Power Mode: Range 1-3\*)** 572 ft·lbf

**Rated Net Power - 1,600 rpm - ISO 9249 at Minimum Fan Speed (Standard Power Mode: Range 1-3\*)** 156 HP

## BUCKETS

**Bucket Capacities** 2.1-5 m<sup>3</sup> (2.7-6.5 yd<sup>3</sup>)

**Bucket Capacities - Light Material** 3.1-5 m<sup>3</sup> (4.0-6.5 yd<sup>3</sup>)

**Bucket Capacities - General Purpose** 2.1-2.7 m<sup>3</sup> (2.7-3.5 yd<sup>3</sup>)

## WEIGHTS

**Operating Weight** 31382 lb

## CAB

**ROPS** ISO 3471:2008

**FOPS** ISO 3449:2005 Level II

**Note (2)** The declared dynamic operator sound pressure levels per ISO 6396:2008\*, when properly installed and maintained, are:  
– Standard cab: 68 ±3 dB(A)  
– Deluxe cab: 66 ±2 dB(A)

**Note (1)** Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.

**Note (3)** \*The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

## STEERING

**Steering Cycle Times - Full Left to Full Right - At 1,800 rpm: 90 rpm Steering Wheel Speed** 2.4 s

<b>Maximum Steering Torque - 40° (Full Turn)</b>	27747 ft·lbf
<b>Maximum Flow - Steering Pump</b>	34 gal/min
<b>Number of Steering Wheel Turns - Full Left to Full Right or Full Right to Full Left</b>	3.5 turns
<b>Maximum Working Pressure - Steering Pump</b>	3500 psi
<b>Maximum Steering Torque - 0° (Straight Machine)</b>	37155 ft·lbf
<b>Steering Articulation Angle - Each Direction</b>	40°

## SERVICE REFILL CAPACITIES

<b>Hydraulic System - Including Tank</b>	43.6 gal (US)
<b>Hydraulic Tank</b>	23.8 gal (US)
<b>Rear Axles</b>	6.6 gal (US)
<b>Transmission - Gear Box</b>	2.2 gal (US)
<b>Diesel Exhaust Fluid (DEF) Tank</b>	5 gal (US)
<b>Front Axles</b>	6.9 gal (US)
<b>Note</b>	DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1.
<b>Fuel Tank</b>	51.5 gal (US)
<b>Engine Crankcase</b>	5.3 gal (US)
<b>Cooling System</b>	7.9 gal (US)

## LOADER HYDRAULIC SYSTEM

**Hydraulic Cycle Time - Standard Mode at 1,600 rpm - Float Down, Maximum Lift to Ground Level** 2.7 s

**Hydraulic Cycle Time - Standard Mode at 1,600 rpm - Raise, Ground Level to Maximum Lift** 5.7 s

**Note (1)** \*3rd and 4th function flow is fully adjustable from 20% to 100% of maximum flow through the secondary display, when equipped.

**Relief Pressure- Tilt Cylinder - 3rd and 4th Function Maximum Working Pressure** 3771 psi

**Maximum Working Pressure- Implement Pump** 3771 psi

**Relief Pressure- Tilt Cylinder** 4061 psi

**Relief Pressure- Tilt Cylinder - 3rd and 4th Function Relief Pressure** 4061 psi

**Maximum Flow - Implement Pump - 4th Function Maximum Flow\*** 42 gal/min

**Hydraulic Cycle Time - Performance Mode at 1,800 rpm - Dump, at Maximum Lift Height** 1.5 s

**Hydraulic Cycle Time - Performance Mode at 1,800 rpm - Raise, Ground Level to Maximum Lift** 5.1 s

**Hydraulic Cycle Time - Performance Mode at 1,800 rpm - Float Down, Maximum Lift to Ground Level** 2.7 s

**Hydraulic Cycle Time - Standard Mode at 1,600 rpm - Total Cycle Time** 10.1 s

**Hydraulic Cycle Time - Standard Mode at 1,600 rpm - Dump, at Maximum Lift Height** 1.7 s

**Hydraulic Cycle Time - Performance Mode at 1,800 rpm - Total Cycle Time** 9.3 s

**Maximum Flow - Implement Pump** 50 gal/min

**Maximum Flow - Implement Pump - 3rd Function Maximum Flow\*** 50 gal/min

## SOUND

**Note (1)** European Union Directive "2000/14/EC"

**Operator Sound Pressure (ISO 6396:2008)** 72 dB(A)

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

## AXLES

**Rear** Oscillating  $\pm 11$  degrees; Open differential (standard); Limited slip differential (optional)

**Front** Fixed; Locking differential (standard)

## TRANSMISSION

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

**Forward and Reverse - Range 4** 25 mile/h

**Forward and Reverse - Range 3** 17 mile/h

**Note** \*Creep 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).

**Forward and Reverse - Range 2** 8 mile/h

## TIRES

**Note (3)** Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

**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.

**Other Choices Include** 20.5 R25, radial (L-2); 20.5 R25, radial (L-5); 20.5-25 12PR (L-2); 20.5-25 12PR (L-3); 20.5-25 16PR (L-5); 600/65 R25 radial (L-3); Skidder/Agriculture; Solid Tires

**Standard Size** 20.5 R25, radial (L-3)

## 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 of refrigerant which has a CO<sub>2</sub> equivalent of 2.717 metric tonnes.

## SUSTAINABILITY

**Recyclability** 94%

## 930M STANDARD EQUIPMENT

### POWER TRAIN

Axle Duo-Cone™ seal guards

Auto idle shut down feature

Cat C7.1 engine

- Power modes (Standard and Performance)
- Power by range (High Power in Range 4)
- Turbocharged and aftercooled
- Diesel particulate filter (Fit for Life)

Coded start (requires secondary display)

Differential lock in front axle

Enclosed wet disc full hydraulic brakes

Hydraulically driven demand cooling fan

Hydrostatic transmission with electronic control

- Operator modes (Default, TC, Hystat, and Ice)
- Directional Shift Aggressiveness (fast, medium, slow)
- Rimpull control, adjust wheel torque
- Creeper control, adjust ground speed

Parking brake, electric

Single plane cooling package wide six fins per inch density

Oil sampling ports  
Throttle lock and max speed limiter

## **HYDRAULICS**

Automatic lift lower and tilt 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)  
Load sensing hydraulics and steering  
Seat-mounted hydraulic joystick controls

## **ELECTRICAL**

Alternator, 115 amp, heavy duty  
Batteries, 1,000 CCA (2) 24V system, disconnect switch  
Back-up alarm  
Emergency shutdown switch  
Halogen work and roading lights, LED rear tail lights  
Product Link™ PRO with three year subscription  
Remote jump start post  
Resettable main and critical function breakers

## **OPERATOR ENVIRONMENT**

75 mm (3 in) High-Vis retractable seat belt, with audible alarm and indicator  
Automatic temperature control  
Cab, pressurized  
Camera, rearview, with dedicated display  
External heated mirrors with lower parabolic  
Ground level cab door release  
Hydraulic control lockout  
Mirror, single  
Lunch box storage  
Radio ready speakers  
Rear window defrost, electric  
Column mounted multi function control – lights, wipers, turn signal  
Tilt and telescopic steering wheel  
Tinted front glass  
Wet arm wiper/washer, 2-speed and intermittent, front, lights, wipers, turn signal  
Suspension seat, fabric

## **OTHER STANDARD EQUIPMENT**

Large-access enclosure doors with adjustable close/open force  
Cat optimized Z-bar linkage with parallel lift  
Recovery hitch, with pin  
Remote mounted lubrication points  
Lockable compartments and enclosures



# 930M OPTIONAL EQUIPMENT

## OPTIONAL EQUIPMENT

Autolube, integrated in secondary display

Auxiliary flow, third and fourth function

Differential, limited slip, rear

Beacon light, strobe

Cab, deluxe (standard in Europe)

- Camera, rearview integrated into advanced display
- Electrically adjustable external heated mirrors (2)
- Secondary display to enable features and adjust parameters
- LED interior lighting
- Sunscreen, front and rear
- Touchscreen secondary display
- Ride control adjustable speed activation
- Preventative maintenance reminders
- Integrated help function (26 languages)

Camera, roof mounted, front view with separate display

Cold start package

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

Counterweight, additional options

Coupler (Fusion and ISO 23727)

Debris packages (low, medium, high)

Fenders (extended cover and full coverage)

Guarding packages

Linkage, high lift

Lights, auxiliary, halogen or LED with engine and DEF compartment lights

Payload Technology

- Cat Production Measurement (CPM)
- CPM Printer

Product Link ELITE with capabilities for software push, data logging, histogram and trend mapping

Radio packages

Rear Object Detection

Ride Control System, adjustable through secondary display

Seats

- 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.

Steering

- Dual mode and secondary

Tire Pressure Monitoring (TPM)