

## **TECHNICAL SPECIFICATIONS**

See cat.com for complete specifications.

ENGINE		
Engine Model	Cat	C13
Engine Power @ 1,700 rpm – ISO 14396:2002	313 kW	420 hp
Gross Power @ 1,700 rpm – SAE J1995:2014	317 kW	425 hp
Net Power @ 1,700 rpm – ISO 9249:2007, SAE J1349:2011	293 kW	393 hp
Engine Torque @ 1,200 rpm – ISO 14396:2002	2185 N·m	1,612 lbf-ft
Gross Torque @ 1,200 rpm – SAE J1995:2014	2206 N·m	1,627 lbf-ft
Net Torque @ 1,100 rpm – ISO 9249:2007, SAE J1349:2011	2086 N·m	1,539 lbf-ft
Displacement	12.	5 L

- Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final, and Japan 2014 emission standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.

WEIGHT	S	
Operating Weight	30 344 kg	66,877 lb

Weight based on a machine configuration with Bridgestone 29.5R25 VSNT L4
radial tires, full fluids, operator, standard counterweight, ride control cold start,
roading fenders, Product Link, open differential axles (front/rear), secondary
steering, sound suppression, and a 5.4 m³ (7.1 yd³) general purpose bucket with
BOCE.

	<b>BUCKET CAPACITIES</b>		
Bucket Range		4.0- 14.5 m³	5.25- 19.0 yd³
	TRANSMICCION		

TRANSMISSION					
Forward 1	6.9 km/h	4.3 mph	Reverse 1	7.8 km/h	4.8 mph
Forward 2	13.3 km/h	8.3 mph	Reverse 2	15.2 km/h	9.4 mph
Forward 3	23.5 km/h	14.6 mph	Reverse 3	26.9 km/h	16.7 mph
Forward 4	39.5 km/h	24.5 mph	Reverse 4	39.5 km/h	24.5 mph

 Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 935 mm (37 in) roll radius.

SOUND	
With Cooling Fan Speed at Maximum Value:	
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
Exterior Sound Pressure Level (SAE J88:2013)	78 dB(A)*
*Distance of 15 m (40.2 ft) marriage formular in second marri	

\*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

With Cooling Fan Speed at 70% of Maximum Value:\*\*

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

Exterior Sound Power Level 109 dB(A)\*\*\*

\*\*For machines in European Union countries and in countries that adopt the "EU Directives."

OPERATING SPECIFICATIONS	S	
Static Tipping Load – Full 40° Turn – with Tire Deflection	19 706 kg	43,432 lb
Static Tipping Load – Full 40° Turn – No Tire Deflection	20 965 kg	46,208 lb
Breakout Force	227 kN	51,008 lbf

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

SERVICE REFILL CAPACITIE	S	
Fuel Tank	426 L	112.5 gal
DEF Tank	21 L	5.5 gal
Cooling System	52 L	13.7 gal
Crankcase	37 L	9.8 gal
Transmission	77 L	20.3 gal
Differentials and Final Drives – Front	84 L	22.2 gal
Differentials and Final Drives – Rear	84 L	22.2 gal
Hydraulic Tank	153 L	40.4 gal

HYDRAULIC SYSTEM		
Implement System:		
Maximum Pump Output (2,250 rpm)	449 L/min	119 gal/min
Maximum Operating Pressure	34 300 kPa	4,975 psi
Hydraulic Cycle Time – Total	10.1 s	econds

DIBAC	MCIONC			
DIME	NSIONS			
	Standard L	.ift	High Lift	
Height to Top of Hood	3064 mm	10'1"	3064 mm	10'1"
Height to Top of Exhaust Pipe	3764 mm	12'5"	3764 mm	12'5"
Height to Top of ROPS	3829 mm	12'7"	3829 mm	12'7"
Ground Clearance	456 mm	1'5"	456 mm	1'5"
Center Line of Rear Axle to Edge of Counterweight	2661 mm	8'9"	2661 mm	8'9"
Center Line of Rear Axle to Hitch	1900 mm	6'3"	1900 mm	6'3"
Wheelbase	3800 mm	12'6"	3800 mm	12'6"
Overall Length (without bucket)	8155 mm	26'10"	8355 mm	27'5"
Hinge Pin Height at Maximum Lift	4554 mm	14'11"	4775 mm	15'7"
Hinge Pin Height at Carry	632 mm	2'0"	682 mm	2'2"
Lift Arm Clearance at Maximum Lift	3881 mm	12'8"	4125 mm	13'6"
Rack Back at Maximum Lift	61 deg	rees	61 deg	rees
Rack Back at Carry Height	48 deg	rees	50 deg	rees
Rack Back at Ground	40 deg	rees	40 deg	rees
Width over Tires (Loaded)	3260 mm	10'9"	3260 mm	10'9"
Tread Width	2440 mm	8'0"	2440 mm	8'0"

 All dimensions are approximate and based on machine equipped with 5.4 m³ (7.1 yd³) general purpose bucket with BOCE and Bridgestone 29.5R25 VSNT L4 radial tires.

## AIR CONDITIONING SYSTEM

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg (3.53 lb) of refrigerant which has a  $\rm CO_2$  equivalent 2.288 metric tonnes (2.522 tons).

<sup>\*\*\*</sup>European Union Directive "2000/14/EC" as amended by "2005/88/EC."

## **STANDARD & OPTIONAL EQUIPMENT**

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
	STANDARD	OFTIONAL
Cab, pressurized, sound suppression		
Door, remote opening system		•
EH implement controls, parking brake	•	-
HMU steering wheel		•
Steering, joystick	•	
Entertainment radio		•
CB radio ready		•
Seat, cloth, air suspension	•	
Seat, suede/cloth, air suspension, heated		•
Seat, leather/cloth, air suspension, heated/ cooled		•
Touchscreen display	•	
Visibility: mirrors, rear-vision camera	•	
Multiview (360 degree) vision system		•
Cat Detect rear radar system		•
Dedicated rearview screen		•
Mirrors, heated		•
Air conditioner, heater, defroster (auto	•	
temp, fan)		
Sun visor, front and rear, retractable	•	
Window cleaning standing surface, front	•	
Windows, front, safety laminated rounded glass	•	
Windows, front, heavy duty, or full guards		•
4-point seat belt (kit)		•
Fire extinguisher mount (kit)		•
3		
ON DOADD TECHNIOLOGIES	CTANDADD	OBTIONAL
ON-BOARD TECHNOLOGIES Cat Payload scale	STANDARD	OPTIONAL
Cat Payload scale	•	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires	STANDARD	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security	•	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles	•	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids	•	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM	•	OPTIONAL
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload	•	OPTIONAL
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Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner Radiator, high debris	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN  Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner Radiator, high debris Cooling fan, reversible	•	•
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Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner Radiator, high debris Cooling fan, reversible Axles, open differentials Axles, limited slip differential(s) Axles, ecology drains, AOC ready, extreme	•	•
Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN  Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner Radiator, high debris Cooling fan, reversible Axles, open differentials Axles, limited slip differential(s)	•	•
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Cat Payload scale Autodig with Auto Set Tires Operator ID & machine security Application Profiles Job Aids Controls Help and eOMM Cat Advanced Payload Cat Payload Printer  POWER TRAIN Cat C13 engine Electric fuel priming pump Fuel-water separator and secondary fuel filter Engine, air precleaner Turbine, air precleaner Radiator, high debris Cooling fan, reversible Axles, open differentials Axles, limited slip differential(s) Axles, ecology drains, AOC ready, extreme temperature seals Axles, oil cooler Transmission, planetary, automatic powershift	•	•
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POWER TRAIN (CONTINUED)	STANDARD	OPTIONAL
Service brakes, hydraulic, fully enclosed wet disc, wear indicators	•	
Integrated Braking System (IBS)	•	
Park brake, caliper on front axles, spring applied-pressure released	•	
HYDRAULICS	STANDARD	OPTIONAL
Implement system, load sensing with variable displacement piston pump Steering system, load sensing with	•	
dedicated variable displacement piston pump	•	
Ride control, dual accumulators	•	
3 <sup>rd</sup> auxiliary function with ride control		•
Oil sampling valves, Cat XT™ hoses	•	
Quick coupler control		•
ELECTRICAL	STANDARD	OPTIONAL
Starting and charging system, 24V	•	
Starter, electric, heavy duty	•	
Cold start, 120V or 240V		•
Lights: halogen, 4 cab work lights, 2 front roading lights with turn signals, 2 rear hood work lights	•	
Lights: LED		•
Warning beacon		•
Reversing strobe lights		•
MONITORING SYSTEM	STANDARD	OPTIONAL
Front dash with analog gauges, LCD display, and warning lights	•	
Primary touchscreen monitor (Cat Payload, quad screens, machine settings & messages)	•	
LINKAGE	STANDARD	OPTIONAL
LINKAGE Standard lift, Z-bar	STANDARD  •	OPTIONAL
	STANDARD  •	OPTIONAL •
Standard lift, Z-bar	STANDARD  •	
Standard lift, Z-bar High lift, Z-bar	•	
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt	•	•
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT	•	OPTIONAL
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear	•	• OPTIONAL
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil	•	• OPTIONAL
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system	•	OPTIONAL  O O O O
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system	•	OPTIONAL  O O
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank	•	OPTIONAL  O O O
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Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank Toolbox Wheel chocks Secondary steering system, electrical <sup>1</sup>	STANDARD	•  OPTIONAL  • • • • • • • • • • • • •
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank Toolbox Wheel chocks Secondary steering system, electrical¹  SPECIAL CONFIGURATIONS	•	OPTIONAL  O O O O O O O O O O O O O O O O O O
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank Toolbox Wheel chocks Secondary steering system, electrical¹  SPECIAL CONFIGURATIONS Aggregate handler	STANDARD	•  OPTIONAL  • • • • • • • • • • • • •
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank Toolbox Wheel chocks Secondary steering system, electrical¹  SPECIAL CONFIGURATIONS	STANDARD	OPTIONAL  O OPTIONAL  O OPTIONAL
Standard lift, Z-bar High lift, Z-bar Kickouts: lift and tilt  ADDITIONAL EQUIPMENT  Cat Autolube system Fenders, extensions or roading Guards: power train, crankcase, cab, cylinders, rear Biodegradable hydraulic oil High-speed oil change system Rear egress system Fast fill fuel tank Toolbox Wheel chocks Secondary steering system, electrical¹  SPECIAL CONFIGURATIONS  Aggregate handler Waste and scrap	STANDARD	OPTIONAL  O O O O O O O O O O O O O O O O O O

<sup>&</sup>lt;sup>1</sup> Standard in the EU/UK