

Cat[®] 548 GF/LL Forest Machines

The new 548 next generation forest machine offers superior performance and exceptional comfort and safety to help you produce extraordinary results.

Superior Performance

- The Cat® C7.1 twin turbo engine offers 30 percent more power* and can run on biodiesel and other renewable fuels.
- Smart mode helps reduce fuel consumption by automatically matching engine and hydraulic power to working conditions.
- Pick and place logs with precision and power with the all-new electrohydraulic control system.
- Heavy lift mode and 30 percent more swing torque* help you move big logs with confidence.
- Bigger boom cylinders boost Log Loader lift capability by 7 percent*.
- Get to work faster with a 10 percent increase in travel speed.*
- Auxiliary hydraulic options let you use Cat grapples and a variety of other attachments.
- Work in extreme environments with standard high-ambient capability of 52° C (126° F) and cold start capability of –32° C (–25° F).

Unmatched Operator Comfort

- Forestry cab comes in a choice of rear entry or side entry with tilt-up console plus 25 percent more space*.
- New dual HVAC system keeps operators comfortable in either cold or warm weather.
- A wide heated and cooled air-suspension seat makes year-round work more pleasant.
- All controls are in front of you within easy reach to reduce twisting and turning and keep you focused on the work area.
- Tilting cab risers 559 mm (22"), 1219 mm (48"), and 1829 mm (72") are available to help keep you on top of the work.
- Stow your gear with in-cab storage behind the seat and in the consoles.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

*All comparisons to 2021 model year 548.

Simple Operation

- Start the engine with a push button; use a Bluetooth key fob or the unique Operator ID function.
- Use Operator ID to program your attachment functions, joystick response, and engine power mode; it will remember your settings each time you go to work.
- Make operating easier with the touch of a joystick button. An optional auxiliary relay allows you to power on or turn off a CB radio or other attachments without taking your hands off the joysticks.
- Make moving the machine much easier with optional Cat Stick Steer. Simply push a button and use one hand to travel and turn instead of both hands or feet on levers or pedals.
- The engine's regeneration system functions automatically with no operator input or interruption to work.
- Navigate easily on the high-resolution touchscreen monitor.
- The available Cat PL161 attachment locator helps you find tools you need up to a range of 60 m (200') even if it's hidden beneath overgrowth or debris.
- Not sure how a function works or how to maintain the machine? Always have the operator's manual at your fingertips in the touchscreen monitor.

Versatile Configurations

- General Forestry configuration is available with several stick and hydraulic options so you can equip it for road building, grapple work, or processing.
- Log Loader configuration is ideal for truck loading, Butt-n-Top loading, power clam applications, and millyard work.
- Rugged, reliable, simple-to-service Cat forestry grapples range in size from 1320 mm (52") to 1524 mm (60").
- Special Tri Link shoes are available for lower ground pressure and extra flotation in soft, wet underfoot conditions.



Easy Maintenance

- Expect up to 15 percent lower maintenance cost and consume 50 fewer filters than the previous model*. (Savings calculated over 12,000 machine hours.)
- The diesel particulate filter requires no maintenance.
- Replace fuel filters at 1,000 hours twice the interval from the previous filters.
- Get improved filtration and longer 3,000 service life with the new hydraulic oil return filter – 50 percent longer service than previous filter designs.
- · Boost productivity with proactive service reminders. The new integrated vehicle health management system alerts the operator with step-by-step service guidance along with parts needed so you don't experience any unnecessary downtime.
- The high-efficiency cooling fan runs only when needed; program intervals so the fan automatically reverses to keep cores clean without interrupting your work.
- Scheduled Oil Sampling (S·O·S[™]) ports simplify maintenance and allow for quick, easy extraction of fluid samples for analysis.
- Standard Product Link[™] provides location, machine hours. fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through VisionLink online interface, helping you improve jobsite efficiency with lower operating costs.
- Remote troubleshoot** connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote flash** works around your scheduled to ensure your machine's software is up to date for optimal performance.

Enhanced Safety

- The cab meets the following standards: **Rollover Protective Structure (ROPS)/Falling Object Protective** Structure (FOPS)/Operator Protective Structure (OPS)/ **Tip Over Protective Structure (TOPS)** ISO 8082-2:2011 ISO 8083:2006 11.600J ISO 10262:1998 Level II ISO 8084:2003 SAF J1356 MAR2013 WCB G603 March 2021 OR-OSHA 437-007-775(14)
- With a flip of a switch, the new Cat easy lock cab riser on the rear-entry Log Loader with 1219 mm (48") and 1829 mm (72") tilting risers makes tilting the cab for transport simple and safe without the use of hand tools. A light option enhances visibility inside the entire riser compartment.
- Access most routine maintenance points at ground level.
- New right-hand steps provide easy, safe, and quick access to upper service platform; the steps and service platform use anti-skid punch plate to prevent slipping.
- Larger 32 mm (1¹/₄") polycarbonate front window, smaller cab pillars, and a flat engine hood improve visibility by 50 percent*.
- Standard rearview camera enhances jobsite visibility; a sideview camera is optional.
- The monitor's slope and grade indicator shows you the machine's position so you can optimize its performance.
- Add an optional swing alarm to alert people when you're rotating the machine.

Standard and Optional Equipment

**Requires cell coverage.

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

	Standard	Optional
BOOMS AND STICKS		
5.9 m (19'6") Reach boom – General Forestry		\checkmark
6.55 m (21'6") boom – Log Loader		\checkmark
2.95 m (9'8") Reach stick		√
3.71 m (12'2") goose neck stick		\checkmark
3.76 m (12'4") under/under stick		\checkmark
4.05 m (13'3") over/under stick		✓
4.05 m (13'3") power clam		✓
CAB		
ROPS Forestry cab with polycarbonate	\checkmark	
windows		
4-point harness seat belt	\checkmark	
Rear entry		\checkmark
Side entry		√
559 mm (22") tilting riser		√
1219 mm (48") tilting riser		√
1829 mm (72") tilting riser		\checkmark
Heated and cooled seat with	\checkmark	

	Standard	Optional
CAB (continued)		
Integrated joysticks	\checkmark	
Tilt-up left-side console (side-entry cab only)	~	
High-resolution touchscreen monitor	\checkmark	
Bluetooth integrated radio (including USB, aux port and microphone)	~	
12V DC outlets	\checkmark	
Keyless push-to-start engine control	\checkmark	
Automatic bi-level air conditioner	\checkmark	
LED dome and floor lights	\checkmark	
Windshield wiper and washer	✓	
Behind seat storage	\checkmark	
CB radio mounts		\checkmark
Retractable sunshade	\checkmark	
Cat Stick Steer		\checkmark
Auxilary relay		\checkmark

(continued on next page)

air-adjustable suspension

Standard and Optional Equipment (continued)

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

	Standard	Optional
CAT® TECHNOLOGIES		
Cat Product Link™	\checkmark	
Remote Services capability	\checkmark	
ELECTRICAL SYSTEM		
Maintenance-free 1,000 CCA batteries (×4)	\checkmark	
Centralized electrical disconnect switch	√	
LED chassis, boom, and cab lights	\checkmark	
Premium lighting – General Forestry – six additional LED lights		~
Premium lighting – Log Loader – 10 additional LED lights		~
ENGINE		
Electric fuel priming pump	\checkmark	
Cold start package with block heater and ether assist		\checkmark
Three selectable modes: Power, Smart, Eco	\checkmark	
Automatic engine speed control	\checkmark	
Automatic engine idle shutdown	\checkmark	
Up to 4500 m (14,764 ft) altitude capability	\checkmark	
52° C (126° F) high-ambient cooling capacity	\checkmark	
–32° C (–25° F) cold start capability	\checkmark	
Hydraulic reverse fan	\checkmark	
Two-stage fuel filter system	\checkmark	
Double element air filter with integrated pre-cleaner	\checkmark	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	\checkmark	
Boom and stick drift reduction valve	\checkmark	
Electronic main control valve	\checkmark	
Automatic hydraulic oil warmup	\checkmark	
Automatic swing parking brake	\checkmark	
High performance hydraulic return filter	\checkmark	
Automatic two speed travel	\checkmark	
Bio hydraulic oil capability	\checkmark	
High torque swing drive	\checkmark	
Swing cushion valve	\checkmark	
Tool control software	\checkmark	
Medium pressure circuit		\checkmark

	Standard	Optional
SAFETY AND SECURITY		
Caterpillar One Key security system	\checkmark	
Easy lock cab tilting system (rear-entry cab only)		\checkmark
Cab riser light		\checkmark
Inspection lighting		\checkmark
Lockable service doors	\checkmark	
Lockable external tool/storage box	\checkmark	
Lockable fuel cap and hydraulic tank	\checkmark	
Service platforms with anti-skid plate and countersunk bolts	\checkmark	
Right-hand handrail and handhold	\checkmark	
Signaling/warning horn	\checkmark	
Ground-level secondary engine shutoff switch	√	
Rearview camera	\checkmark	
Right-hand sideview camera		\checkmark
Travel alarm	\checkmark	
Swing alarm		\checkmark
SERVICE AND MAINTENANCE		
Integrated vehicle health management system		\checkmark
Side-entry service platform	√	
Left- and right-side fuel filll locations	\checkmark	
Grouped location for engine oil and fuel filters	√	
S·O·S [™] sampling ports	\checkmark	
UNDERCARRIAGE AND STRUCTURES		
High Wide undercarriage	\checkmark	
Grease lubricated track with positive pin retention	\checkmark	
Catwalks	\checkmark	
Tie down points	✓	
Counterweight fuel tank	✓	
900 mm (36") triple grouser Tri Link shoes		\checkmark
850 mm (33") triple grouser shoes		\checkmark
700 mm (28") double and single grouser shoes		\checkmark
Heavy-duty track rollers	\checkmark	
Heavy-duty travel motor guards	~	
Heavy-duty bottom guards	\checkmark	
Track guiding guards	\checkmark	
High drawbar final drives	\checkmark	
Heavy-duty recoil springs	✓	
Heavy-duty hydraulic swivel	~	
Heavy-duty hydraulic swivel guard	\checkmark	

Technical Specifications

Engine		
Engine Model	Cat [®] C	7.1TTA
Engine Power – ISO 9249:2007	202.4 kW	271 hp
Engine Power – ISO 14396:2002	205.0 kW	275 hp
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.1 L	433.3 in ³

*Meets U.S. EPA Tier 4 Final, EU Stage V emission standards.

• Power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator.

• Rated speed at 1,900 rpm.

Drive				
Maximum Travel Speed	4.8 km/h	3.0 mph		
Maximum Drawbar Pull	295 kN	66,319 lbf		
Hydraulic Sys	tom			
Main System – Maximum Flow – Implement	502 L/min	132.6 gal/min		
Maximum Pressure – Equipment –		152.0 gai/iiiii		
Implement	35 000 kPa	5,076 psi		
Maximum System Pressure – Heavy Lift Mode	38 000 kPa	5,511 psi		
Maximum Pressure – Travel	35 000 kPa	5,076 psi		
Maximum Pressure – Swing	28 000 kPa	4,061 psi		
Swing Mecha	nism			
Swing Speed		rpm		
Maximum Swing Torque	136 kN⋅m	100,308 lbf-ft		
Weights				
Operating Weight – General Forestry	37 800 kg	83,300 lb		
• High Wide undercarriage, Reach boom, R2. 700 mm (28") double grouser shoes, no bucl	95 m (9'8") Read			
Operating Weight – Log Loader, Over/Under	40 700 kg	89,730 lb		
• High Wide undercarriage, Log Loader boom, 4.05 m (13'3") Over/Under stick with live heel, 700 mm (28") double grouser shoes, no grapple.				
Service Refill Capacities				
Fuel Tank Capacity	990 L	262 gal		
Cooling System	38.0 L	10 gal		
Engine Oil (with filter)	25 L	7 gal		
Swing Drive	13.5 L	4 gal		
Final Drive (each)	9.5 L	3 gal		
Hydraulic System (including tank)	348 L	92 gal		
Hydraulic Tank	185 L	49 gal		
Diesel Exhaust Fluid (DEF) Tank	41 L	11 gal		

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.00 kg of refrigerant which as a CO₂ equivalent of 1.430 metric tonnes.

Wor	king Range	es		
General Forestry	king nunge			
Processor				
Reach 5.9 m (19'4") boom, dr	op nose 3.71 m	n (12'2") p	rocessor sti	ck
Maximum Reach at Ground I	Level	1 08e8	nm	29'6"
Road Builder				
Reach 5.9 m (19'4") boom, Re 1.54 m³ (2.01 yd³) HD bucket		8") stick,		
Maximum Reach at Ground I	_evel	10 0 4 0	mm 32'11"	
Log Loader				
Under/Under				
Log Loader 6.55 m (21'6") bo	om, under/und	er 3.76 m	(12'4") stick	
Maximum reach at ground le	evel	11 440 r	nm	37'6"
Over/Under				
Log Loader 6.55 m (21'6") bo				
Maximum reach at ground le	evel	12 350 r	nm	40'6"
Power Clam				
Log Loader 6.55 m (21'6") bo				
Maximum reach at ground le	evel	10 480 r	nm	34'5"
Di	imensions			
	General Fo	restry	Log Lo	ader
Boom	Reach 5.9 m	ı (19'4")	6.55 m (2	21'6")
Stick	Reach 2.95 m (9'8")		Over/Under 4.05 m (13'3")	
Stick	Drop Nose 3.71 m (12'2")		Under/Under 3.76 m (12'4")	
Stick	Power Clam 4.05 m (13'3")			
Shipping Height (cab tilted)	3500 mm	11'6"	3480 mm	11'5"
Handrail Height	3500 mm	11'6"	3500 mm	11'6"
Shipping Length*				
Processor – no attachment	12 570 mm	41'3"		
Road Builder – with bucket	11 920 mm	39'1"		_

Processor – no attachment	12 570 mm	41'3"	—	—
Road Builder – with bucket	11 920 mm	39'1"	—	—
Under/Under – no grapple	—		15 120 mm	49'7"
Over/Under – no grapple	—	—	15 210 mm	49'11"
Power Clam – no grapple			14 060 mm	46'2"
Tail Swing Radius	3530 mm	11'7"	3530 mm	11'7"
Counterweight Clearance	1500 mm	4'11"	1500 mm	4'11"
Ground Clearance	780 mm	2'7"	780 mm	2'7"
Track Length	5050 mm	16'7"	5050 mm	16'7"
Length to Center of Rollers	4020 mm	13'2"	4020 mm	13'2"
Track Gauge	2790 mm	9'2"	2790 mm	9'2"
Transport Width – 700 mm (28") shoes	3530 mm	11'7"	3580 mm	11'9"
*Boom and stick stretched out.				

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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AEXQ3513-01 (01-2023) Build Number: 07A (Aus-NZ, Jpn, N Am)

