

# 538 GF/538 LL

FOREST MACHINES



Engine Power (ISO 14396)  
Operating Weight

129.4 kW (174 hp)  
GF 29 600 kg (65,268 lb)  
LL 31 460 kg (69,357 lb)



# CAT®

# 538

## MAKES LOG WORK PRODUCTIVE AND PROFITABLE

For serious loggers, the **Cat® 538** is the best choice in its size class. In fact, General Forestry and Log Loader models can be tailored to meet your specific needs and make your work in the woods even more productive and profitable.



**GENERAL FORESTRY**



**LOG LOADER**

### **NEXT GENERATION FOREST MACHINES**

Cat® Next Generation Forest Machines offer you more value than ever for your business.

- + MORE PERFORMANCE
- + MORE COMFORT
- + MORE SAFETY

Simply put, Cat Next Generation Forest Machines help you move more timber to make more money.

# DO MORE WORK WITH LESS COST

Increased power and efficiency coupled with decreased maintenance mean you will spend more time working instead of more money on fuel and filters.

## IMPROVE PRODUCTION UP TO 10%<sup>1</sup>

Move heavy logs confidently with 10% greater swing torque and an on-demand Heavy Lift mode. Add 12% more travel speed and a 15% taller undercarriage and you will get up and down and over stumps faster than ever.

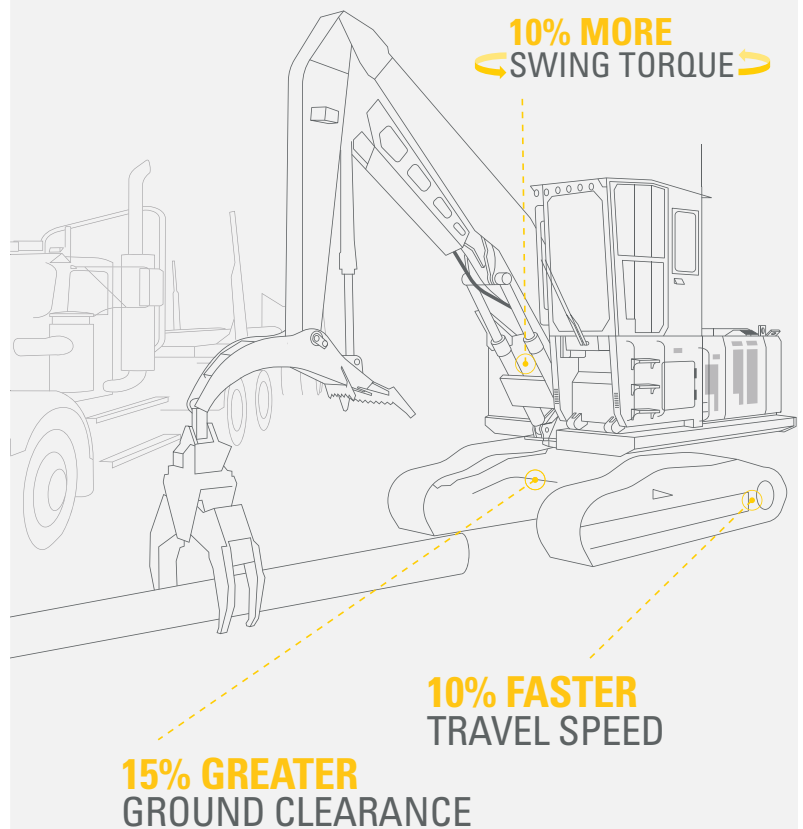
## IMPROVE FUEL EFFICIENCY UP TO 5%<sup>1</sup>

The C7.1 engine and electrohydraulic system work in sync to help you move plenty of lumber without burning truckloads of diesel fuel. Just the right engine speed along with a large hydraulic pump ensure you get maximum production with each unit of fuel.

## LOWER MAINTENANCE COSTS UP TO 15%<sup>1&2</sup>

Experience increased uptime and reduced costs with new longer life fuel and hydraulic oil filters. Fuel filters have double the life of the previous filters, and the hydraulic oil return filter provides 50% more service life.

## GET MORE WORK DONE



<sup>1</sup> Compared to 2020 538 in Smart mode.

<sup>2</sup> Cost reduction based on 12,000 hours of operation.

# CHOICES FOR YOUR UNIQUE WORK

## GENERAL FORESTRY AND LOG LOADER

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The General Forestry model is ideal for road work, grappling, processing, and delimiting. The Log Loader model is the right choice for shovel logging, log loading, Butt-n-Top, Power Clam, and millyard applications.



### GENERAL FORESTRY

#### FRONTLESS

- + No boom or stick allows you to customize the machine for stroke delimiting and other unique applications.

#### ROAD BUILDER

- + This configuration comes with a reach boom and is quick coupler ready so you can equip it with a bucket, thumb, and other attachments.

#### PROCESSOR

- + Optimized hydraulics and drop nose stick make this configuration ideal for roadside processing.

## LOG LOADER

### UNDER/UNDER

- + The under-mounted heel cylinder provides maximum force for shovel logging.

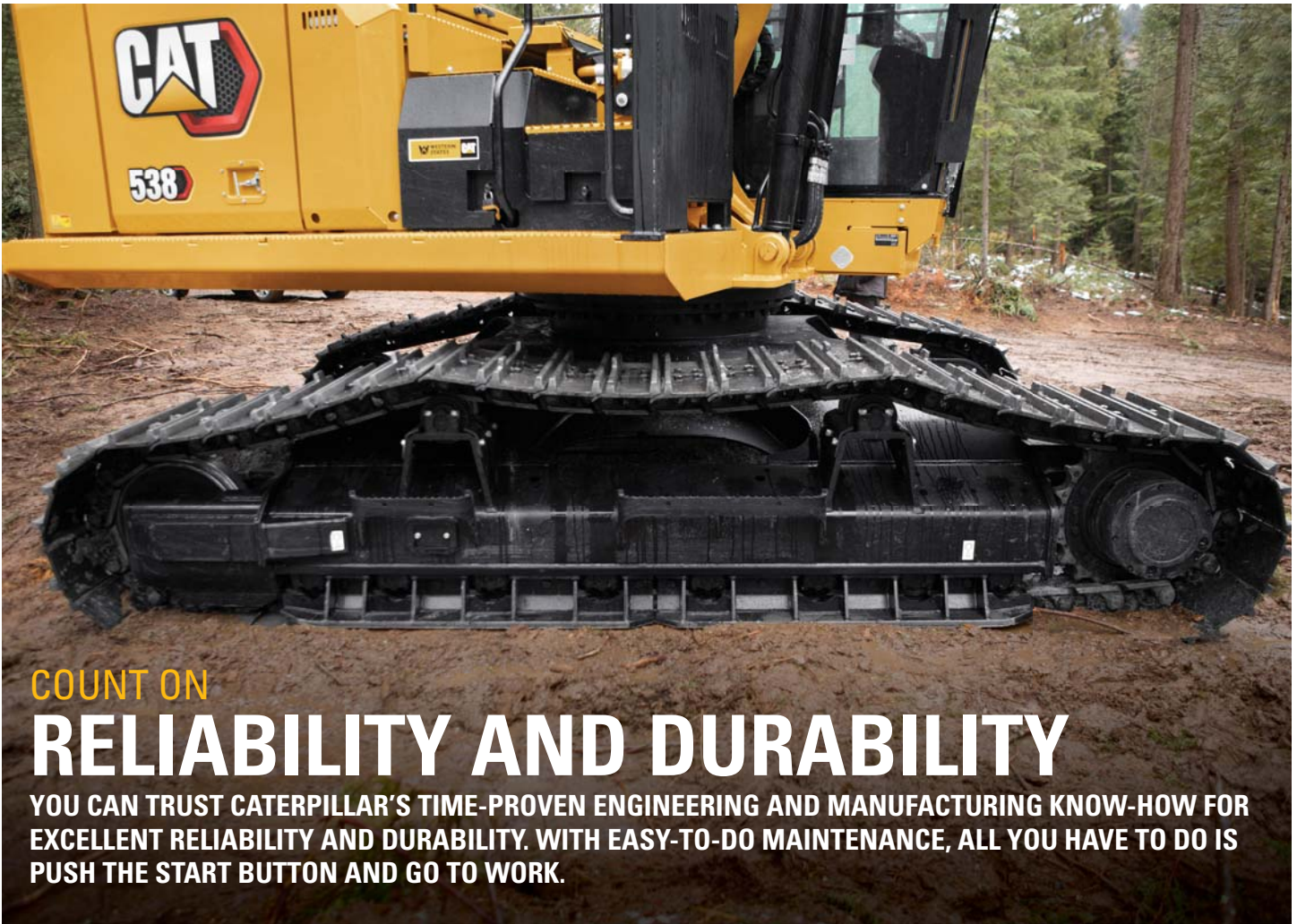
### OVER/UNDER

- + The over-mounted heel cylinder provides maximum clearance to load and increases lift height for millyard applications.

### POWER CLAM

- + This configuration includes an auxiliary pump and can be equipped with a Power Clam or Butt-n-Top attachment.





COUNT ON

# RELIABILITY AND DURABILITY

YOU CAN TRUST CATERPILLAR'S TIME-PROVEN ENGINEERING AND MANUFACTURING KNOW-HOW FOR EXCELLENT RELIABILITY AND DURABILITY. WITH EASY-TO-DO MAINTENANCE, ALL YOU HAVE TO DO IS PUSH THE START BUTTON AND GO TO WORK.

In addition to reinforced booms and sticks, a huge difference in overall Cat machine durability is the undercarriage. It is the link between the ground and upper body and absorbs many of the stresses between them. That's why we put so much effort into making ours better than competitors, starting with High Wide undercarriage to make traveling over stump-laden forests trouble free. In fact, the 538 undercarriage is built with many heavy-duty reinforcements.

- + HEAVY-DUTY TRACK ROLLERS
- + HEAVY-DUTY TRACK LINK
- + HEAVY-DUTY FINAL DRIVES
- + HEAVY-DUTY TRAVEL MOTOR GUARDS
- + HEAVY-DUTY RECOIL SPRINGS
- + HEAVY-DUTY SWIVEL AND SWIVEL GUARD





**CAB TAKES**

# THE HARD OUT OF WORK

**SITES WHERE THE 538 TYPICALLY WORK ARE RUGGED AND CHALLENGING. THAT'S WHY IT'S IMPORTANT THAT THE CAB KEEPS THE OPERATOR COMFORTABLE AND PROTECTED FROM FATIGUE, STRESSES, SOUNDS, AND OUTSIDE TEMPERATURES.**

## CERTIFIED FORESTRY

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The Certified Forestry ROPS cab is sound suppressed, sealed, and 25% larger than the previous series' cab with a wider and taller door. Larger windows and lower front profile give you up to 50% greater visibility to the work and surrounding jobsite. Available cab risers put you in an even better position for greater land clearing efficiency.

## CLIMATE CONTROL

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An all-new dual HVAC system keeps operators comfortable in either cold or warm weather. Other features include filtered positive ventilation and fresh air windows with guarding screens.

## SEAT AND JOYSTICK CONSOLE

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The seat is heated and cooled. It's also wide and fully adjustable to fit the needs of all types of operators. The tilt-up console makes getting in and out of the seat easier, and all controls are located in front of you to reduce back-stressing twisting and turning.

## CONNECTIVITY AND STORAGE

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Convenience features include Bluetooth® integrated radio, USB ports for charging and phone connectivity, 12V DC outlets and AUX port, cup and bottle holders, and storage in rear, overhead, and console compartments.



## TOUCHSCREEN MONITOR

Most machine settings can be controlled through the high-resolution touchscreen monitor. It offers 42 languages and is easy to reach from the seat with no twisting or turning.



## SMART MODE

The Smart Mode, one of three power mode settings, automatically adjusts engine and hydraulic power for the highest fuel efficiency – less power for tasks such as swinging and more power for lifting. Operators can set and store their power mode preference using Operator ID; owners can lock in the mode they want their operators to use to help manage fuel consumption.



## CUSTOMIZABLE JOYSTICKS

Select joystick functions can be customized through the monitor. Joystick pattern as well as response can be set to match operator preference. All preferences are saved with Operator ID and restored at login.



## KEYLESS PUSH START

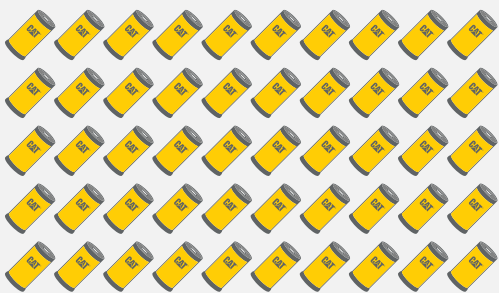
Keyless push-button engine start adds security by using Operator ID codes to limit and track machine access. Codes can be entered manually, via an optional Bluetooth key fob, or smart phone app.

# LOWER MAINTENANCE COSTS WITH MORE UPTIME



## SAVE MONEY

THE NEXT GENERATION 538  
CONSUMES **50 FEWER FILTERS\***



FEWER FILTERS,  
LONGER INTERVALS,  
LESS COST,  
MORE PRODUCTIVITY

**\*COMPARED TO PREVIOUS 538 OVER 12,000 HOURS**

The 538's extended and synchronized service intervals mean you'll be able to spend more time working and up to 15% less in maintenance costs than the previous model.

### KEY MAINTENANCE COST REDUCTIONS INCLUDE:

- + Consolidated filter locations and grease points to reduce service time
- + Hydraulic return filter with 3,000 hour service life – 50% longer than the previous filter
- + Fuel filters with 1,000 hour service life – twice as long as the previous filters
- + New high-efficiency hydraulic fan with programmable automatic reverse function to help keep cores clean
- + S-O-S<sup>SM</sup> ports to enable quick extraction of fluid samples and more simplified maintenance



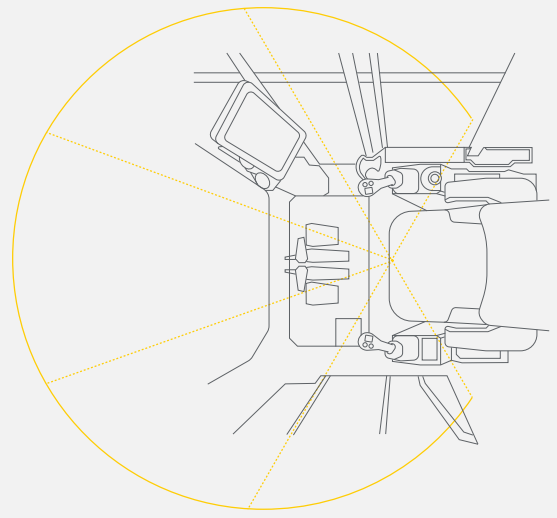


# BUILT FOR YOUR SAFETY AND OTHERS

Unique design, reinforced components, and special features and guards make the 538 safe, reliable, and durable.

- + The standard ROPS cab has a larger 32 mm (1¼") polycarbonate front window, smaller cab pillars, and a flat engine hood to improve visibility by 50% over the previous series.
- + The carbody is 15% higher off the ground than the previous 538 and has heavy-duty bottom guards to make traveling over stumps and other obstacles trouble free.
- + Wide track gauge and available slope and grade indicator on the monitor help enhance stability and lift.
- + You can access most routine maintenance points at ground level. New right-hand steps provide safe and quick access to the upper service platform; the steps and service platform use anti-skid punch plate to prevent slipping.
- + Secure who can start the machine with Operator ID or use an optional Bluetooth key fob or Cat App on your smartphone.
- + A standard rearview camera enhances jobsite visibility; an optional right-hand-sideview camera makes it even better.

## 50% GREATER VISIBILITY\*



\*CAT NEXT GENERATION 538 COMPARED TO PREVIOUS 538

# MAKE MANAGING EQUIPMENT EASIER WITH CAT LINK

**CAT LINK** telematics technology helps take the complexity out of managing your jobsites – by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.



## **PRODUCT LINK™**

Product Link™ collects data automatically and accurately from your assets. Information such as location, hours, fuel usage, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

## **VISIONLINK®**

Access information anytime, anywhere with VisionLink® – and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting (or both).

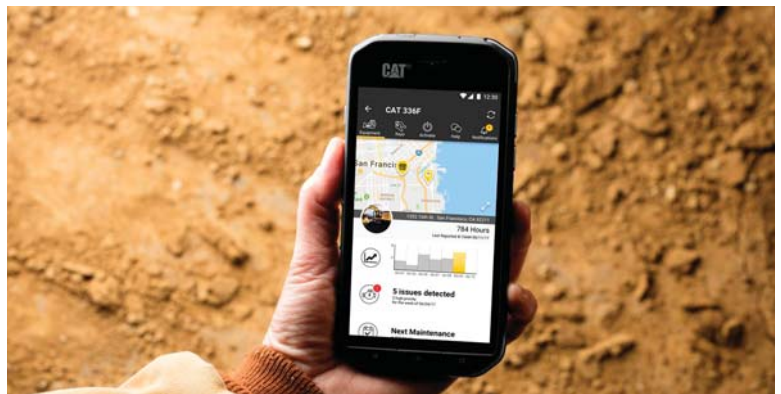


**Remote Services\*** is a suite of technologies that improve your jobsite efficiency.

**Remote Troubleshoot** allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote Troubleshoot ensures the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.

**Remote Flash** updates on-board software without a technician being present, potentially reducing update time by as much as 50%. You can initiate the update when convenient, increasing your overall operating efficiency.

\*Must be within cell range coverage.



The **Cat App** helps you manage your assets – at any time – right from your smartphone. You can see your fleet location, hours, and other information you need to see. You will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.

# INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

Easily expand the performance of your machine by utilizing any of the variety of Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of the Cat machine for improved performance, safety, and stability.



## GRAPPLES

Cat log loading grapples are made with high-strength steel for maximum performance. They are ideal for picking and sorting, bunching and loading, and shoveling applications. Bolt-on access panels make them easier to service.



## BUCKETS

Cat buckets move material quickly and efficiently. Their unique design enables more efficient filling and better operator control, which improves overall productivity.



## COUPLERS

Cat quick couplers allow you to change between tools in minutes, making the machine capable of doing a variety of money-making tasks.



## ATTACHMENT TRACKING MADE EASY

The Cat PL161 Attachment Locator is a Bluetooth device that makes finding grapples, buckets, and other gear quick and easy. The excavator's onboard Bluetooth reader or Cat App on your phone will locate the device automatically.



MORE THAN  
**MACHINES**



When you buy Cat equipment, you're getting so much more than the machine. You're also getting the support of a best-in-class dealer network backed by a range of flexible solutions, technology, tools, and more. It's all about support that's built around your success.

- + Customer Value Agreements (CVA)
- + Cost-saving service and repair options
- + Quality parts and precision components
- + Financing solutions
- + Rental and used equipment



# TECHNICAL SPECIFICATIONS

See [cat.com](http://cat.com) for complete specifications.

ENGINE		
Engine Model	Cat® C7.1	
Net Power – ISO 9249	128.5 kW	172 hp
Engine Power – ISO 14396	129.4 kW	174 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7 L	428 in <sup>3</sup>
<ul style="list-style-type: none"> <li>• Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.</li> <li>• Advertised power is tested per the specified standard in effect at the time of manufacture.</li> <li>• Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.</li> <li>• Rated speed is 1,800 rpm.</li> </ul>		
DRIVE		
Maximum Travel Speed	4.9 km/h	3.0 mph
Maximum Drawbar Pull	246 kN	55,303 lbf
HYDRAULIC SYSTEM		
Main System – Maximum Flow – Implement	468 L/min (234 × 2 pumps) 124 gal/min (62 × 2 pumps)	
Maximum Pressure – Equipment – Implement	35 000 kPa	5,076 psi
Maximum Pressure – Equipment – Heavy Lift Mode	38 000 kPa	5,511 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	30 000 kPa	4,351 psi
SWING MECHANISM		
Swing Speed	11 rpm	
Maximum Swing Torque	98 kN-m	72,281 lbf-ft
MACHINE WEIGHT		
Operating Weight – General Forestry	29 600 kg	65,268 lb
<ul style="list-style-type: none"> <li>• High Wide undercarriage, processing boom and goose neck stick with integrated drop nose, 700 mm (28") double grouser shoes, no processor head.</li> </ul>		
Operating Weight – Log Loader	31 460 kg	69,357 lb
<ul style="list-style-type: none"> <li>• High Wide undercarriage, over/under boom and stick with heel rack, 700 mm (28") double grouser shoes, no grapple.</li> </ul>		
SERVICE REFILL CAPACITIES		
Fuel Tank Capacity	990 L	262 gal
Cooling System	17.5 L	5 gal
Engine Oil (with filter)	25 L	7 gal
Swing Drive (each)	11.5 L	3 gal
Final Drive (each)	4.5 L	1 gal
Hydraulic System (including tank)	262 L	69 gal
Hydraulic Tank	143 L	38 gal
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 has a CO <sub>2</sub> equivalent of 1.430 metric tonnes.				
WORKING RANGES				
<b>General Forestry</b>				
<b>Processor</b>				
Reach 5.7 m (18'8") boom, drop nose 3.7 m (12'2") processor stick				
Maximum Reach at Ground Level	8800 mm	28'10"		
<b>Road Builder</b>				
Reach 5.7 m (18'8") boom, thumb-ready 2.9 m (9'6") stick, 1.4 m <sup>3</sup> (1.8 yd <sup>3</sup> ) HD bucket				
Maximum Reach at Ground Level	9820 mm	32'3"		
<b>Log Loader</b>				
<b>Under/Under</b>				
Log Loader 5.9 m (19'6") straight boom, under/under 3.5 m (11'6") stick				
Maximum Reach at Ground Level	10 790 mm	35'5"		
<b>Over/Under</b>				
Log Loader 5.9 m (19'6") straight boom, over/under 3.8 m (12'6") stick				
Maximum Reach at Ground Level	11 540 mm	37'10"		
<b>Power Clam</b>				
Log Loader 5.9 m (19'6") straight boom, under/under 3.8 m (12'6") stick				
Maximum Reach at Ground Level	9680 mm	31'9"		
DIMENSIONS				
	General Forestry		Log Loader	
<b>Boom</b>	Reach 5.7 m (18'8") SB 5.9 m (19'6")		SB 5.9 m (19'6")	
<b>Stick</b>	Reach Thumb-Ready 2.9 m (9'6")		Under/Under 3.5 m (11'6")	
<b>Stick</b>	Drop Nose 3.7 m (12'2")		Over/Under 3.8 m (12'6")	
<b>Stick</b>	—		Power Clam 3.8 m (12'6")	
<b>Shipping Height (top of cab)</b>				
Fixed Riser	3670 mm	12'1"	—	
Cab Tilted	—		3310 mm	10'10"
<b>Handrail Height</b>	3265 mm	10'9"	3265 mm	10'9"
<b>Shipping Length</b>				
Processor – no attachment	9870 mm	32'5"	—	
Roadbuilder – with bucket	9750 mm	32'0"	—	
Under/Under – no grapple	—		13 980 mm	45'10"
Over/Under – no grapple	—		14 710 mm	48'3"
Power Clam – no grapple	—		12 830 mm	42'1"
<b>Tail Swing Radius</b>	3135 mm	10'3"	3135 mm	10'3"
<b>Counterweight Clearance</b>	1300 mm	4'4"	1300 mm	4'4"
<b>Ground Clearance</b>	758 mm	2'6"	758 mm	2'6"
<b>Track Length</b>	4665 mm	15'4"	4665 mm	15'4"
<b>Length to Center of Rollers</b>	3795 mm	12'5"	3795 mm	12'5"
<b>Track Gauge</b>	2790 mm	9'2"	2790 mm	9'2"
<b>Transport Width</b>				
700 mm (28") shoes	3490 mm	11'5"	3490 mm	11'5"

# STANDARD & OPTIONAL EQUIPMENT

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

BOOM AND STICKS	STANDARD	OPTIONAL
5.7 m (18'8") Reach boom – General Forestry		•
5.9 m (19' 6") Straight boom – Log Loader		•
2.9 m (9'6") Reach thumb-ready stick		•
Goose neck stick		•
Under/under stick		•
Over/under stick		•
Power clam		•

CAB	STANDARD	OPTIONAL
ROPS Forestry cab with polycarbonate windows	•	
4-point harness seat belt	•	
Side entry with 165 mm (6.5") fixed riser		•
Side entry with 1219 mm (48") tilting riser		•
Heated and cooled seat with air-adjustable suspension	•	
Integrated joysticks	•	
Tilt-up left-side console (side-entry cab only)	•	
High-resolution touchscreen monitor	•	
Bluetooth integrated radio (including USB, aux port and microphone)	•	
12V DC outlets	•	
Keyless push-to-start engine control	•	
Automatic bi-level air conditioner	•	
LED dome and floor lights	•	
Windshield wiper and washer	•	
Behind seat storage	•	
CB radio mounts		•
Retractable sunshade	•	

CAT TECHNOLOGIES	STANDARD	OPTIONAL
Cat Product Link	•	
Remote Services capability (depends on cell capability)	•	

ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Maintenance-free 1000 CCA batteries (x4)	•	
Centralized electrical disconnect switch	•	
LED chassis, boom and cab lights	•	
Premium lighting – General Forestry – six additional LED lights		•
Premium lighting – Log Loader – 10 additional LED lights		•

ENGINE	STANDARD	OPTIONAL
Electric fuel priming pump	•	
Cold start package with block heaters and ether assist		•
Three selectable modes: Power, Smart, Eco	•	
Automatic engine speed control	•	
Automatic engine idle shutdown	•	
Up to 4600 m (15,092 ft) altitude capability	•	
48° C (118° F) high-ambient cooling capacity	•	
-32° C (-25° F) cold start capability	•	
Hydraulic reverse fan	•	
Two-stage fuel filter system	•	
Double element air filter with integrated pre-cleaner	•	
Biodiesel capability up to B20	•	

**Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.**

For additional information and additional regional offerings, refer to the Technical Specifications brochure available at [www.cat.com](http://www.cat.com) or your Cat dealer.

# STANDARD & OPTIONAL EQUIPMENT

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

HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Boom and stick regeneration circuits	•	
Boom and stick drift reduction valve	•	
Electronic main control valve	•	
Automatic hydraulic oil warmup	•	
Automatic swing parking brake	•	
High performance hydraulic return filter	•	
Automatic two speed travel	•	
Bio hydraulic oil capability	•	
High torque swing drive	•	
Swing cushion valve	•	
Tool control software	•	
Medium pressure circuit		•
SAFETY AND SECURITY	STANDARD	OPTIONAL
Caterpillar One Key security system	•	
Lockable service doors	•	
Lockable external tool/storage box	•	
Lockable fuel cap and hydraulic tank	•	
Service platforms with anti-skid plate	•	
RH handrail and handhold	•	
Signaling/warning horn	•	
Ground-level secondary engine shutoff switch	•	
Rearview camera	•	
Right-hand sideview camera		•
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Side-entry service platform	•	
Grouped location for engine oil and fuel filters	•	
Ground level dipstick for engine oil	•	
S-O-S <sup>SM</sup> sampling ports	•	

UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
High Wide undercarriage	•	
Grease lubricated track with positive pin retention	•	
Catwalks	•	
Tie down points	•	
Counterweight fuel tank	•	
900 mm (36") triple grouser Tri Link shoes		•
800 mm (31") triple grouser shoes		•
700 mm (28") double grouser shoes		•
600 mm (24") double and single grouser shoes		•
Heavy-duty track rollers and frames	•	
Heavy-duty travel motor guards	•	
Heavy-duty bottom guards	•	
Track guiding guards	•	
High drawbar final drives	•	
Heavy-duty recoil springs	•	
Heavy-duty hydraulic swivel	•	
Heavy-duty hydraulic swivel guard	•	

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For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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AEXQ3133 (02-2021)  
Build Number: 07A  
(Aus-NZ, Jpn, N Am)

