# **330** Hydraulic excavator

Engine Power Operating Weight 204 kW (273 hp) 30 900 kg (68,125 lb) CAT SI 19

CAT

Cat<sup>®</sup> C7.1 engine meets U.S. EPA Tier 4 Final, EU Stage IV, Japan 2014 (Tier 4 Final) and Korea Tier 4 Final emission standards with an aftertreatment system that requires no operator input or downtime.



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### **NEXT GENERATION EXCAVATORS**

The new line of Cat Excavators was designed with a new approach to equipment families that gives you:

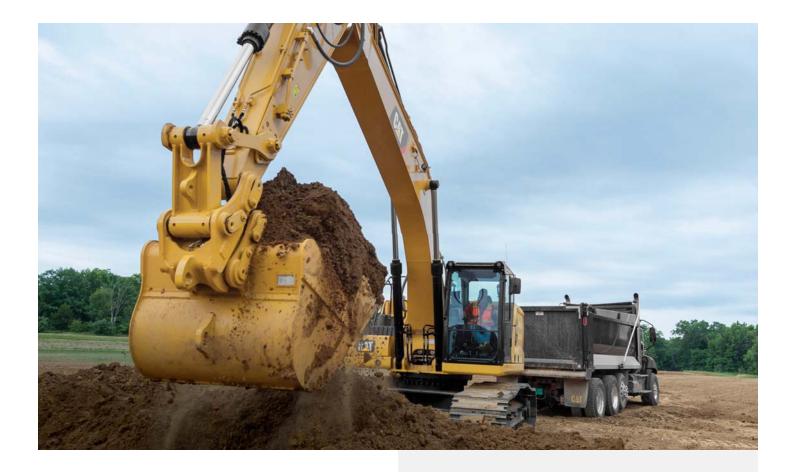
- + MORE MODEL OPTIONS
- + MORE STANDARD TECHNOLOGIES
- + MORE PRICE POINTS

Ready to help you make your business stronger, Cat Excavators give you new ways to get the most work done at the lowest cost – so you put more money in your pocket.



# THE NEW CAT® 3300 MOVING THE STANDARD HIGHER

**THE CAT 330** raises the bar for performance and fuel efficiency in this size class. With the industry's highest level of standard factory technology, a new cab focused on operator comfort and productivity, plus lower fuel and maintenance costs, the 330 will set a new pace for productivity and profit in your operation.



## INCREASE OPERATING EFFICIENCY UP TO 45%<sup>1</sup>

The Cat 330 offers the industry's highest level of standard factory-equipped technology, including Cat GRADE with 2D, GRADE with Assist, and PAYLOAD.

## INCREASE FUEL EFFICIENCY UP TO 20%<sup>2</sup>

With larger hydraulic pumps, a new electro-hydraulic system, and increased bucket capacity, the Cat 330 delivers more work per unit of fuel.

## LOWER MAINTENANCE COSTS UP TO 20%<sup>3</sup>

Fewer maintenance items paired with extended and more synchronized maintenance intervals increases uptime and reduces costs.

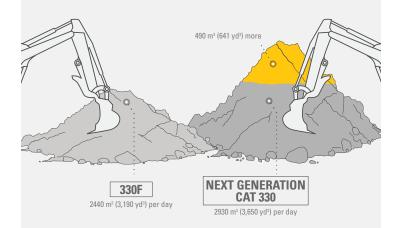
<sup>1</sup> Operator efficiency gains compared to traditional grading methods.

<sup>2</sup> Compared to 330F.

<sup>3</sup> Cost reduction based on 12,000 hours of operation.

## GET MORE OUT OF EVERY MOVE.

MOVE MORE WITH A 20% INCREASE IN FUEL EFFICIENCY.

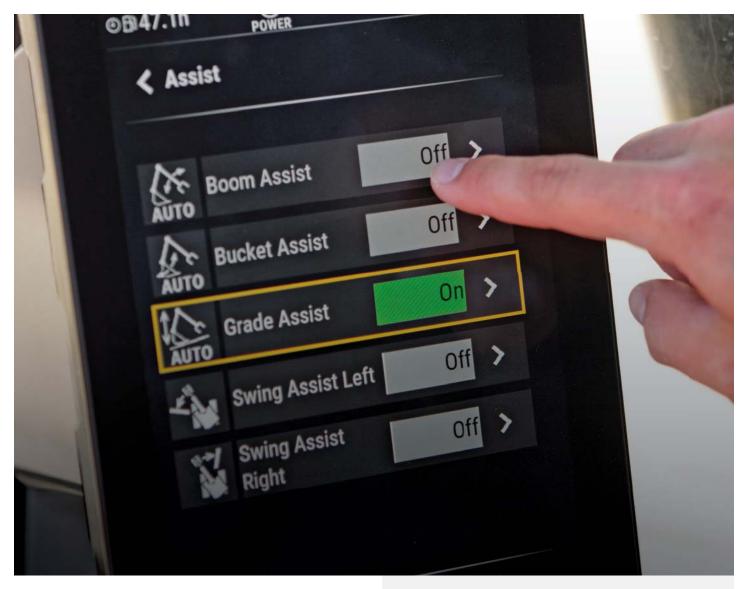


The Next Generation Cat 330 moves 20% MORE than the Cat 330F with the same amount of fuel.

#### SCENARIO:

330F consuming 18 L/hr (4.8 gal/hr), configured with 1.54 m<sup>3</sup> (2.01 yd<sup>3</sup>) bucket, bucket fill factor of 110%, and 20 second cycle times.

330F MOVES AN AVERAGE OF 2440 M<sup>3</sup> (3,190 YD<sup>3</sup>) EACH 8-HOUR DAY USING 145 L (38 GAL) FUEL. NEXT GENERATION 330 MOVES AN ADDITIONAL 490 M<sup>3</sup> (641 YD<sup>3</sup>) USING THE SAME AMOUNT OF FUEL.



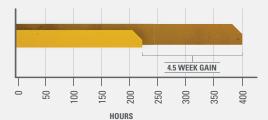
## STANDARD CAT CONNECT TECHNOLOGY GETS JOBS DONE FASTER WITH LESS REWORK

**Cat Connect Technology** gives you the edge. Operators of all experience levels will dig, load, and grade with more confidence, speed, and accuracy. The result?

Better productivity and lower costs.

## WHAT WOULD YOU DO WITH 4.5 MORE WEEKS?

45% GAIN WITH TECHNOLOGY means same amount of work done faster



#### PREVIOUS YEAR:

USING TRADITIONAL GRADING METHODS

400 hours/year, grading with stakes and checkers

#### CURRENT YEAR:

USING NEW CAT 330 WITH CAT CONNECT TECHNOLOGY

220 hours/year, with standard Cat GRADE



## STANDARD, SIMPLE-TO-USE TECHNOLOGIES INCLUDE:



### **STANDARD CAT GRADE WITH 2D**

Cat GRADE with 2D helps operators reach grade faster. Operators cut and fill to exact specifications without overcutting. You can program up to four of your most commonly used target depth and slope offsets so you can get to grade with ease – a real time saver on the job site. Best of all, no grade checkers are needed so the work area is safer.



## STANDARD CAT PAYLOAD

Cat PAYLOAD technology delivers precise load targets with on-the-go weighing, which helps prevent over/underloading and maximizes efficiency. Automated tracking helps manage production and lower cost.

## STANDARD CAT GRADE WITH ASSIST

Automated boom, stick, and bucket movements deliver more accurate cuts with less effort. The operator simply sets the depth and slope in the monitor and activates single-lever digging.

#### **AVAILABLE OPTIONAL UPGRADES**

Cat GRADE with Advanced 2D and Cat GRADE with 3D increase productivity and expand grading capabilities. GRADE with Advanced 2D adds in-field design capabilities through an additional 254 mm (10 inch) high-resolution touchscreen monitor. GRADE with 3D adds GPS and GLONASS positioning for pinpoint accuracy. Use the excavator's onboard cell technology to quickly connect to 3D services like TCC or board.

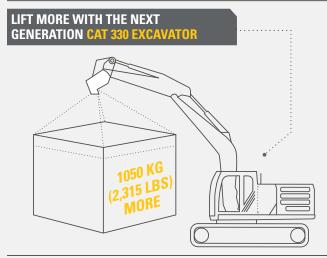


# EXPAND YOUR JOB SITE CAPABILITIES WITH MORE LIFT AND MORE SWING TORQUE

The larger counterweight means you can increase your bucket size and lift up to nine percent more than the 330F.

With more swing pressure, a larger swing drive, and a larger swing bearing, the 330 delivers five percent more swing torque over the 330F, making backfilling and working on slopes easier.

## LEAVE THE **HEAVY LIFTING** TO US.



#### LIFT AS MUCH AS 1050 KG (2,315 LBS) MORE WITH THE NEXT GENERATION CAT 330.

WHEN COMPARED TO THE CAT 330F

Calculated at 4500 mm (14'9") reach over the front, 4500 mm (14'9") below ground level.

SCENARIO:

# LOWER MAINTENANCE COSTS UP TO 20%

With synchronized and extended maintenance intervals, you get more done at a lower cost compared to the 330F. Consolidated filter locations make service faster. Hydraulic, air, and fuel tank filters have increased capacity and longer life. Access to the operation and maintenance manual is easy through the in-cab monitor.

#### **KEY MAINTENANCE COST REDUCTIONS INCLUDE:**

- + New fuel filters and Cat air filter, both with double the service interval compared to previous filters.
- + New hydraulic filter with higher dirt holding capacity, delivering 50% more service life than the previous filter.
- + New electro-hydraulic system removing need for pilot filter and hoses.
- New high-efficiency electric cooling fans only run when needed and reverse to keep cores free from debris.
  Choose between manual and auto reverse fan settings.





# NEW CAB TAKES THE HARD OUT OF WORK

Sites where excavators typically work are rugged and challenging. That's why it's important that the 330 cab protects the operator as much as possible from the fatigue, stresses, sounds, and temperatures of the job.



## NEW SEAT AND CONSOLE REDUCE FATIGUE

Comfort and efficiency of movement keep operators productive and alert all shift long. The new standard seat is wide and adjustable for operators of virtually any size. The Deluxe cab package includes a heated air suspension seat; the Premium seat is both heated and cooled. The tip-up left console makes egress and ingress easy.

## ISO-CERTIFIED ROPS CAB WITH ALL-AROUND VISIBILITY

The ISO-certified ROPS cab is sound suppressed and sealed. The large windows and lower front, right, and rear profile of the machine give outstanding visibility to the work area without the strain of constantly leaning forward. Standard rearview and right-side-view cameras keep operators aware of their surroundings at all times. An optional 360° visibility feature is also available.

## EASY ACCESS, CONNECTIVITY, AND STORAGE

Several built-in convenience features make work more comfortable for operators:

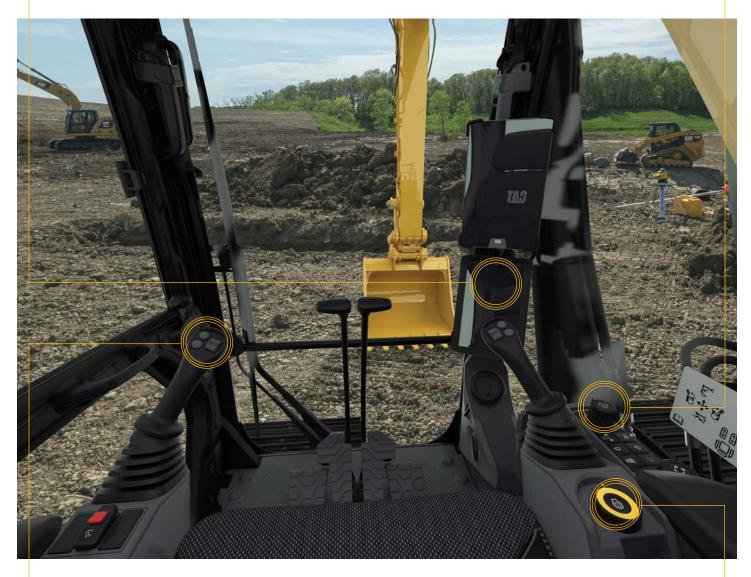
- + Bluetooth® integrated radio
- + USB ports for charging and phone connectivity
- + 12V DC outlets and AUX port
- + Storage in rear, overhead, and console compartments
- + Cup and bottle holders

## **TOUCHSCREEN MONITOR**

Most machine settings can be controlled through the high-resolution 254 mm/10-inch touchscreen monitor. It offers 42 languages and is easy to read from the seat – no twisting or turning. A second 254 mm/10-inch touchscreen monitor is available for the advanced grade control.



The new 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 digging. 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.





Joystick function can be customized through the monitor. Joystick pattern as well as response can be set to match operator preferences. All preferences are saved with the Operator ID and restored at log in.



The 330 uses a keyless push-button engine start. This adds security for the machine by using Operator ID codes to limit and track machine access. Codes can be entered manually, via an optional Bluetooth key fob, or a smartphone app.

# **SAFETY FEATURES** LOOK OUT FOR YOUR PEOPLE AND YOUR EQUIPMENT

Keep your people and your equipment safe with new technology features, a ground-level engine oil dipstick, and new upper platform access on the Cat 330 excavator.



#### LIFT ASSIST

Lift Assist helps you avoid tipping. With visual and auditory alerts, you'll know if your load is within the excavator's safe working range limits.

#### **UPPER PLATFORM ACCESS**

New right service platform design provides easy, safe, and quick access to upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.

#### **SECURE START**

Use your PIN code on the monitor, the optional Bluetooth key fob, or your smartphone to enable the push-button starting feature.

#### **GROUND-LEVEL DAILY MAINTENANCE**

All daily maintenance checks can be performed from ground level, making maintenance faster, easier, and safer. Checkpoints include the engine oil dipstick, fuel water separator, fuel tank water and sediment drains, and cooling system coolant level check.



**E-WALL SWING** 



E-WALL FORWARD



E-WALL CAB PROTECTION



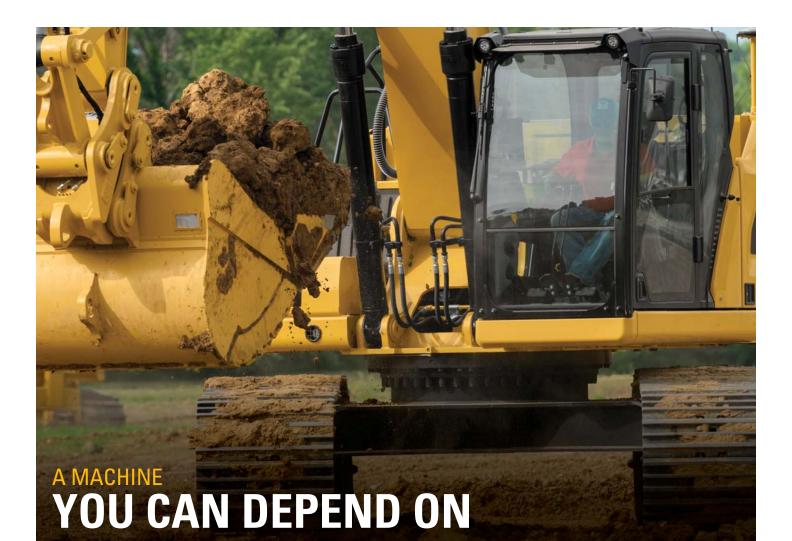
**E-WALL CEILING** 



E-WALL FLOOR

#### STANDARD 2D E-FENCE TECHNOLOGY

The standard 2D E-fence feature automatically stops excavator motion using boundaries you set in the monitor for the entire working envelope – above, below, sides, and front. E-fence features protect equipment from damage and reduce fines related to zoning or underground utility damage. Automatic boundaries even help prevent operator fatigue by reducing overswinging or overdigging.



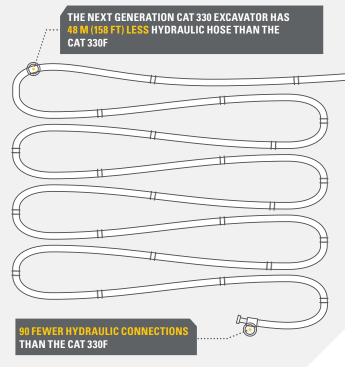
The Cat 330 is a reliable, durable machine. It's designed to take on the hard work you put in front of it every day.

#### **UNIQUE DESIGN FEATURES:**

- + New electro-hydraulic system requires less oil, less hoses, and less couplings for added reliability.
- + Larger swing drive and swing bearing support added swing torque for heavier work.
- + Reinforced front structure and base frame support more lift, more counterweight, and more torque.
- New oval-shaped hydraulic tank increases stress resistance.
- + Technology components are integrated into the machine for added protection.
- + Grease lubricated tracks with a new master pin to deliver double the retention force.

## LESS RISK. MORE REWARD.

REDUCED CHANCE OF LEAKS AND DAMAGE WITH FEWER CONNECTIONS AND LESS HOSE.



## **CAT LINK TECHNOLOGY** TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

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



#### PRODUCT LINK™

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



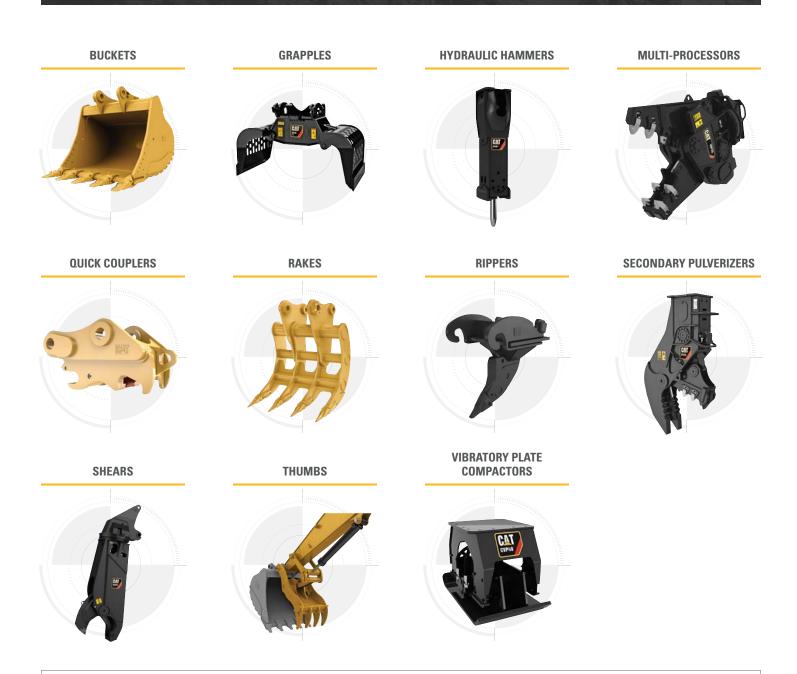
#### VISIONLINK®

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 job site. 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).

Caterpillar releases products, services, and technologies in each region at different time intervals. Please verify with your local Cat dealer for technology availability and specifications.

# INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can 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 Cat Excavators for improved performance, safety, and stability.



Did you know you can find your attachments quickly and easily? The excavator's onboard Bluetooth reader can search for any work tool equipped with Cat asset tracking devices up to a range of 60 meters (200 feet).

## **TECHNICAL SPECIFICATIONS**

See *cat.com* for complete specifications.

ENGINE	
Engine Model	Cat C7.1
Gross Power – ISO 14396/SAE J1995	205 kW 275 hp
Net Power – ISO 9249	204 kW 273 hp
Net Power – SAE J1349	203 kW 272 hp
Engine RPM	
Operation	1,750 rpm
Travel	1,750 rpm
Bore	105 mm 4 in
Stroke	135 mm 5 in
Displacement	7.01 L 428 in <sup>3</sup>
HYDRAULIC SYSTEM	

Main System – Maximum Flow (Implement)	560 L/min 1	48 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Heavy Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	29 800 kPa	4,320 psi

MACHINE WEIGHT		
Operating Weight – 800 mm (31") triple grouser shoes	30 900 kg	68,125 lb
Reach boom, R3.2 m (10'6") stick, HD 1.76 m³ (2.30 yd³ triple grouser shoes and 6700 kg (14,770 lb) counterv		) mm (31")
Operating Weight – 600 mm (24") triple grouser shoes	29 900 kg	65,920 lb

Reach boom, R3.2 m (10'6") stick, HD 1.76 m³ (2.30 yd³) bucket, 600 mm (24") triple grouser shoes and 6700 kg (14,770 lb) counterweight.

#### **SERVICE REFILL CAPACITIES**

Fuel Tank	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	5.5 L	1.5 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal
DEF Tank	41 L	10.8 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 0.9 kg of refrigerant which has a  $CO_2$  equivalent of 1287 metric tonnes.

DIMENSIONS			
Boom	Reach Boom 6.15 m (20'2")		
Stick	Reach Stick 3.2 m (10'6")		
Bucket	HD 1.76 m <sup>3</sup> (2.30 yd <sup>3</sup> )		
Shipping Height (top of cab)	3060 mm	10'1"	
Handrail Height	3060 mm	10'1"	
Shipping Length	10 420 mm	34'2"	
Tail Swing Radius	3130 mm	10'3"	
Track Length to Center of Rollers	3990 mm	13'1"	
Ground Clearance	490 mm	1'7"	
Track Gauge	2590 mm	8'6"	
Track Gauge – Narrow Undercarriage	2390 mm	7'10"	
Transport Width – 600 mm (24") Shoes	3190 mm	10'6"	
Transport Width – 600 mm (24") Shoes – Narrow Undercarriage	2990 mm	9'10"	
Transport Width – 800 mm (31") Shoes	3390 mm	11'1"	
Counterweight Clearance	1120 mm	3'8"	

#### WORKING RANGES AND FORCES

Boom	Reach Boom 6.15 m (20'2")
Stick	Reach Stick 3.2 m (10'6")
Bucket	HD 1.76 m <sup>3</sup> (2.30 yd <sup>3</sup> )
Maximum Digging Depth	7240 mm 23'9"
Maximum Reach at Ground Level	10 680 mm 35'1"
Maximum Cutting Height	10 030 mm 32'11"
Maximum Loading Height	6950 mm 22'10"
Minimum Loading Height	2300 mm 7'7"
Maximum Depth Cut for 2440 mm (8') Level Bottom	7090 mm 23'3"
Maximum Vertical Wall Digging Depth	6010 mm 19'9"
Bucket Digging Force (ISO)	179 kN 40,200 lbf
Stick Digging Force (ISO)	126 kN 28,300 lbf
Bucket Digging Force (SAE)	157 kN 35,300 lbf
Stick Digging Force (SAE)	123 kN 27,700 lbf

## **STANDARD & OPTIONAL EQUIPMENT**

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

CAB	STANDARD	OPTIONAL	BOOMS AND STICKS	STANDARD	OPTIONAL
ROPS, standard sound suppression (Deluxe only)	٠		6.15 m (20'2") Reach boom, 3.2 m (10'6") reach stick	٠	
ROPS, advanced sound suppression (Premium only)	•		6.15 m (20'2") Reach boom, 2.65 m (8'8") reach stick		٠
Air-adjustable seat with heat (Deluxe only)	٠		10.2 m (33'6") SLR boom, 7.85 m (25'9")		
Auto-adjustable seat with heat and air ventilation (Premium only)		•	SLR stick		•
High-resolution 203 mm (8 in)	•*		UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
LCD touchscreen monitor	•		600 mm (24") triple grouser shoes		٠
High-resolution 254 mm (10 in) LCD touchscreen monitor	•	•*	700 mm (28") triple grouser shoes 800 mm (31") triple grouser shoes		•
*Korea only			Tie-down points on base frame	•	
		OPTIONAL	6700 kg (14,770 lb) counterweight	•	
CAT CONNECT TECHNOLOGY	STANDARD	OPTIONAL			
Cat Product Link	•		ELECTRICAL SYSTEM	STANDARD	OPTIONA
Cat GRADE with 2D	•		Two 1,000 CCA maintenance free batteries	٠	
Cat GRADE with Advanced 2D		•	Programmable time-delay LED working lights	•	
Cat GRADE with 3D		٠	LED chassis light, left-hand/right-hand boom	٠	
Cat GRADE with Assist	•		lights, cab lights		
Cat PAYLOAD	•		SERVICE AND MAINTENANCE	STANDARD	OPTIONA
2D E-Fence	•		Sampling ports for Scheduled Oil Sampling (S·O·S <sup>™</sup> )	•	
ENGINE	STANDARD	OPTIONAL	Ground-level and platform-level engine		
Three selectable power modes	•		oil dipsticks	٠	
One-touch low idle with automatic engine speed control	•		Electric refueling pump with auto shut off		٠
Auto engine idle shutdown	٠		SAFETY AND SECURITY	STANDARD	OPTIONA
52° C (125° F) high-ambient cooling capacity with de-rate	•		Rearview camera	•	
–32° C (–25° F) cold start capability		٠	Right-side-view camera	•	
Double element air filter with integrated			360° visibility		•
precleaner	•		Lift Assist	٠	
Reversing electric cooling fans	٠		Ground-level engine shutoff switch	•	
Biodiesel capability up to B20	٠		Right-hand handrail and hand hold	•	
HYDRAULIC SYSTEM	STANDARD	OPTIONAL	Signaling/warning horn	٠	
Boom and stick regeneration circuits		OF HORAL			
Auto hydraulic warm up	•				
Auto two-speed travel	•				
Boom and stick drift reduction valve	•				
Boom and stick lowering check valves	•	•			
Hammer return filter circuit		•			
Advanced Tool Control (two pump,	•*	•			
one/two way high-pressure flow)					
Medium-pressure circuit		•			
Quick coupler circuit		٠			
*Europe only					

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 or your Cat dealer.

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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