



Cat[®]

302.7 CR

(WITH EXPANDABLE UNDERCARRIAGE)

MINI EXCAVATOR

FEATURES:

The Cat[®] 302.7 CR Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

ALL DAY COMFORT

- Choose either a canopy or a sealed and pressurized cab which can be equipped with air conditioning, adjustable wrist rests, and a suspension seat option to help keep you working comfortably all day long.

EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation LCD monitor provides easy to read machine information. An advanced touchscreen monitor can also be equipped.

STICK STEER TRAVEL MODE

- Moving around the job site is even easier with the Cat Stick Steer option. Easily switch from traditional travel controls with levers and pedals to joystick controls to move the machine and to operate the blade. The benefit of less effort and improved control is in your hands!

BIG PERFORMANCE IN A COMPACT DESIGN

- Strong lift and dig performance helps you get the job done faster. The compact radius design and retractable undercarriage let you access and work in the tightest areas. Dozer float allows for easy clean up.

SAFETY ON THE JOB SITE

- Your safety is our top priority. The Cat mini excavator is designed to help keep you safe on the job. Courtesy work lights and a fluorescent retractable seat belt are just a couple of the safety features we've built into the machine.

SIMPLE SERVICE FOR LESS DOWNTIME

- Maintenance is quick and easy on the Cat mini excavator. Routine check points are easy to access at ground level through the side doors. The unique tilt up cab or canopy lets you reach additional service areas when needed.

LOWER OPERATING COSTS

- Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat mini excavator was designed with reducing your operating costs in mind.

UNMATCHED DEALER SUPPORT

- Your Cat dealer is here to help you reach your business goals. From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.

Specifications

Engine

Engine Model	C1.1 Turbo	
Net Power @ 2,400 rpm		
ISO 9249, 80/1269/EEC	17.6 kW	23.6 hp
Gross Power @ 2,400 rpm		
SAE J1995:2014	18.4 kW	24.7 hp
Bore	77.0 mm	3.0 in
Stroke	81.0 mm	3.2 in
Displacement	1.1 L	69.0 in ³

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when the engine is at rated speed and rated power when the engine is installed with the factory configured fan, air intake system, exhaust system, and alternator with a minimum alternator load.

Weights

Minimum Operating Weight with Canopy*	3110 kg	6,858 lb
Maximum Operating Weight with Canopy**	3540 kg	7,806 lb
Minimum Operating Weight with Cab*	3235 kg	7,133 lb
Maximum Operating Weight with Cab**	3660 kg	8,070 lb
EU: CE Plate Weight with Canopy***	2580 kg	5,689 lb
EU: CE Plate Weight with Cab***	2690 kg	5,931 lb

*Minimum Weight is based on fixed rubber tracks, operator, full fuel tank, standard stick, blade, bucket and no extra counterweight.

**Maximum Weight is based on steel tracks, operator, full fuel tank, long stick, blade, bucket and extra counterweight.

***CE Plate Weight is based on the most common EU configuration.

Includes 75 kg (165 lb) operator and full fuel tank and excludes bucket.



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Weight Increase from Minimum Configuration

Cab	125 kg	276 lb
Counterweight (light)	100 kg	221 lb
Counterweight (extra)	250 kg	551 lb
Long Stick	15 kg	33 lb
Steel Tracks	100 kg	221 lb

Travel System

Travel Speed – High	4.5 km/h	2.8 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Maximum Traction Force – High Speed	17.7 kN	3,979 lbf
Maximum Traction Force – Low Speed	31.2 kN	7,014 lbf
Ground Pressure – Minimum Weight	26.5 kPa	3.8 psi
Ground Pressure – Maximum Weight	31.2 kPa	4.5 psi
Gradeability (maximum)	30 degrees	

Service Refill Capacities

Cooling System	4.0 L	1.1 gal
Engine Oil	4.0 L	1.1 gal
Fuel Tank	45.0 L	11.9 gal
Hydraulic Tank	18.0 L	4.8 gal
Hydraulic System	35.0 L	9.2 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	100 L/min	26 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	176 bar	2,553 psi
Auxiliary Circuit – Primary		
Flow*	65 L/min	17 gal/min
Pressure*	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow*	25 L/min	7.0 gal/min
Pressure*	245 bar	3,553 psi
Digging Force – Stick (standard)	13.8 kN	3,102 lbf
Digging Force – Stick (long)	12.3 kN	2,765 lbf
Digging Force – Bucket	23.3 kN	5,238 lbf

*Flow and pressure are not combinable. Under load, as flow rises pressure goes down.

Swing System

Machine Swing Speed	9.0 rpm
Boom Swing – Left	75 Degrees
Boom Swing – Right	50 Degrees

Blade

Width (expanded)	1780 mm	70.1 in
Height	350 mm	13.8 in

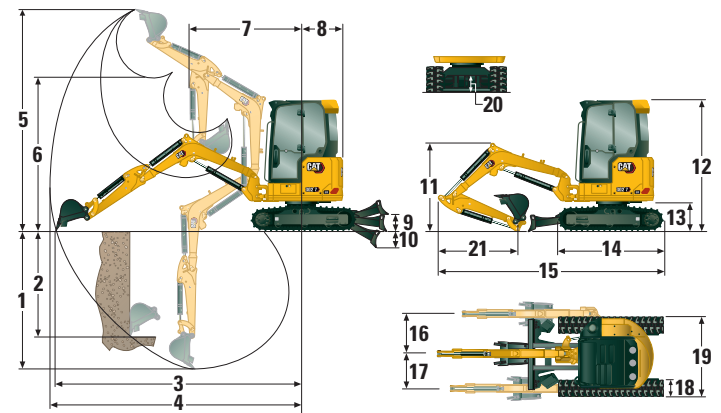
Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 (Level I)

Sound

Operator Sound Pressure (ISO 6396:2008)	78 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	94 dB(A)

• European Union Directive “2000/14/EC”



Dimensions

	Standard Stick	Long Stick
1 Dig Depth	2450 mm (96.5 in)	2650 mm (104.3 in)
2 Vertical Wall	1810 mm (71.3 in)	1990 mm (78.3 in)
3 Maximum Reach at Ground Level	4500 mm (177.2 in)	4690 mm (184.6 in)
4 Maximum Reach	4660 mm (183.5 in)	4850 mm (190.9 in)
5 Maximum Dig Height	4270 mm (168.1 in)	4390 mm (172.8 in)
6 Maximum Dump Clearance	3010 mm (118.5 in)	3130 mm (123.2 in)
7 Boom in Reach	1710 mm (67.3 in)	1730 mm (68.1 in)
8 Tail Swing		
without Counterweight	775 mm (30.5 in)	775 mm (30.5 in)
with Counterweight (light)	845 mm (33.3 in)	845 mm (33.3 in)
with Counterweight (extra)	890 mm (35.0 in)	890 mm (35.0 in)
9 Maximum Blade Height	395 mm (15.6 in)	395 mm (15.6 in)
10 Maximum Blade Depth	520 mm (20.5 in)	520 mm (20.5 in)
11 Boom Height in Shipping Position	1530 mm (60.2 in)	1620 mm (63.8 in)
12 Overall Shipping Height	2530 mm (99.6 in)	2530 mm (99.6 in)
13 Swing Bearing Height	620 mm (24.4 in)	620 mm (24.4 in)
14 Overall Undercarriage Length	2220 mm (87.4 in)	2220 mm (87.4 in)
15 Overall Shipping Length†	4350 mm (171.3 in)	4390 mm (172.8 in)
16 Boom Swing Right	830 mm (32.7 in)	830 mm (32.7 in)
17 Boom Swing Left	605 mm (23.8 in)	605 mm (23.8 in)
18 Track Belt/Shoe Width	300 mm (11.8 in)	300 mm (11.8 in)
19 Track Width		
Retracted	1355 mm (53.3 in)	1355 mm (53.3 in)
Expanded	1780 mm (70.1 in)	1780 mm (70.1 in)
20 Ground Clearance	210 mm (8.3 in)	210 mm (8.3 in)
21 Stick Length	1060 mm (41.7 in)	1260 mm (49.6 in)

†Overall Shipping Length depends on blade position during shipment.

Cab

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front			Over Front			Over Front			m (ft)
			Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	
Lift Point Height	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)		
	3 m (9.8 ft)	Standard Stick				*768 (*1,693)	759 (1,673)	763 (1,682)	*470 (*1,036)	*470 (*1,036)	*470 (*1,036)	3.30 (10.8)
3 m (9.8 ft)	Long Stick								*377 (*831)	*377 (*831)	*377 (*831)	3.54 (11.6)
2 m (6.6 ft)	Standard Stick				*876 (*1,931)	743 (1,638)	748 (1,649)	*426 (*939)	*426 (*939)	*426 (*939)	*426 (*939)	3.86 (12.7)
	Long Stick				*787 (*1,735)	744 (1,640)	748 (1,649)	*346 (*763)	*346 (*763)	*346 (*763)	*346 (*763)	4.06 (13.3)
1 m (3.3 ft)	Standard Stick				*1152 (*2,540)	707 (1,559)	712 (1,570)	*443 (*977)	*443 (*977)	*443 (*977)	*443 (*977)	4.03 (13.2)
	Long Stick				*1084 (*2,390)	703 (1,550)	708 (1,561)	*359 (*791)	*359 (*791)	*359 (*791)	*359 (*791)	4.22 (13.8)
0 m (0 ft)	Standard Stick		*1194 (*2,632)	*1194 (*2,632)	*1194 (*2,632)	*1290 (*2,844)	683 (1,506)	689 (1,519)	*525 (*1,157)	478 (1,054)	486 (1,071)	3.85 (12.6)
	Long Stick		*1189 (*2,621)	*1189 (*2,621)	*1189 (*2,621)	*1270 (*2,800)	674 (1,486)	680 (1,499)	*419 (*924)	*419 (*924)	*419 (*924)	4.05 (13.3)

Minimum Weight includes cab, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front			Over Front			Over Front			m (ft)
			Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	
Lift Point Height	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)		
	3 m (9.8 ft)	Standard Stick				*768 (*1,693)	*768 (*1,693)	*768 (*1,693)	*470 (*1,036)	*470 (*1,036)	*470 (*1,036)	3.30 (10.8)
3 m (9.8 ft)	Long Stick								*377 (*831)	*377 (*831)	*377 (*831)	3.54 (11.6)
2 m (6.6 ft)	Standard Stick				*876 (*1,931)	*876 (*1,931)	871 (1,920)	*426 (*939)	*426 (*939)	*426 (*939)	*426 (*939)	3.86 (12.7)
	Long Stick				*787 (*1,735)	*787 (*1,735)	*787 (*1,735)	*346 (*763)	*346 (*763)	*346 (*763)	*346 (*763)	4.06 (13.3)
1 m (3.3 ft)	Standard Stick				*1152 (*2,540)	903 (1,991)	836 (1,843)	*443 (*977)	*443 (*977)	*443 (*977)	*443 (*977)	4.03 (13.2)
	Long Stick				*1084 (*2,390)	900 (1,984)	832 (1,834)	*359 (*791)	*359 (*791)	*359 (*791)	*359 (*791)	4.22 (13.8)
0 m (0 ft)	Standard Stick		*1194 (*2,632)	*1194 (*2,632)	*1194 (*2,632)	*1290 (*2,844)	880 (1,940)	813 (1,792)	*525 (*1,157)	*525 (*1,157)	*525 (*1,157)	3.85 (12.6)
	Long Stick		*1189 (*2,621)	*1189 (*2,621)	*1189 (*2,621)	*1270 (*2,800)	871 (1,920)	804 (1,773)	*419 (*924)	*419 (*924)	*419 (*924)	4.05 (13.3)

Maximum Weight includes cab, steel tracks, extra counterweight, operator, full fuel tank and blade.

Canopy

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front			Over Front			Over Front			m (ft)
			Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	
Lift Point Height	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)		
	3 m (9.8 ft)	Standard Stick				*768 (*1,693)	724 (1,596)	732 (1,614)	*470 (*1,036)	*470 (*1,036)	*470 (*1,036)	3.30 (10.8)
3 m (9.8 ft)	Long Stick								*377 (*831)	*377 (*831)	*377 (*831)	3.54 (11.6)
2 m (6.6 ft)	Standard Stick				*876 (*1,931)	709 (1,563)	717 (1,581)	*426 (*939)	*426 (*939)	*426 (*939)	*426 (*939)	3.86 (12.7)
	Long Stick				*787 (*1,735)	709 (1,563)	717 (1,581)	*346 (*763)	*346 (*763)	*346 (*763)	*346 (*763)	4.06 (13.3)
1 m (3.3 ft)	Standard Stick				*1152 (*2,540)	672 (1,482)	681 (1,501)	*443 (*977)	431 (950)	442 (974)	*443 (*977)	4.03 (13.2)
	Long Stick				*1084 (*2,390)	668 (1,473)	677 (1,493)	*359 (*791)	*359 (*791)	*359 (*791)	*359 (*791)	4.22 (13.8)
0 m (0 ft)	Standard Stick		*1194 (*2,632)	*1194 (*2,632)	*1194 (*2,632)	*1290 (*2,844)	648 (1,429)	657 (1,448)	*525 (*1,157)	453 (999)	464 (1,023)	3.85 (12.6)
	Long Stick		*1189 (*2,621)	*1189 (*2,621)	*1189 (*2,621)	*1270 (*2,800)	639 (1,409)	648 (1,429)	*419 (*924)	413 (911)	*419 (*924)	4.05 (13.3)

Minimum Weight includes canopy, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)			
			Over Front			Over Front			Over Front			m (ft)
			Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	
Lift Point Height	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)	kg (lb)		
	3 m (9.8 ft)	Standard Stick				*768 (*1,693)	*768 (*1,693)	768 (1,693)	*470 (*1,036)	*470 (*1,036)	*470 (*1,036)	3.30 (10.8)
3 m (9.8 ft)	Long Stick								*377 (*831)	*377 (*831)	*377 (*831)	3.54 (11.6)
2 m (6.6 ft)	Standard Stick				*876 (*1,931)	*876 (*1,931)	842 (1,856)	*426 (*939)	*426 (*939)	*426 (*939)	*426 (*939)	3.86 (12.7)
	Long Stick				*787 (*1,735)	*787 (*1,735)	*787 (*1,735)	*346 (*763)	*346 (*763)	*346 (*763)	*346 (*763)	4.06 (13.3)
1 m (3.3 ft)	Standard Stick				*1152 (*2,540)	869 (1,916)	807 (1,779)	*443 (*977)	*443 (*977)	*443 (*977)	*443 (*977)	4.03 (13.2)
	Long Stick				*1084 (*2,390)	865 (1,907)	803 (1,770)	*359 (*791)	*359 (*791)	*359 (*791)	*359 (*791)	4.22 (13.8)
0 m (0 ft)	Standard Stick		*1194 (*2,632)	*1194 (*2,632)	*1194 (*2,632)	*1290 (*2,844)	845 (1,863)	784 (1,728)	*525 (*1,157)	*525 (*1,157)	*525 (*1,157)	3.85 (12.6)
	Long Stick		*1189 (*2,621)	*1189 (*2,621)	*1189 (*2,621)	*1270 (*2,800)	836 (1,843)	775 (1,709)	*419 (*924)	*419 (*924)	*419 (*924)	4.05 (13.3)

Maximum Weight includes canopy, steel tracks, extra counterweight, operator, full fuel tank and blade.

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

302.7 CR Mini Excavator

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ENGINE			OPERATOR ENVIRONMENT (continued)		
Cat C1.1 Turbo Engine (U.S. EPA Tier 4 Final/EU Stage V)	✓		Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only) (Cab only)		✓
Automatic Engine Idle	✓		Next Generation Color LCD Monitor (IP66)	✓	
Automatic Engine Shutdown	✓		– Fuel Level and Coolant Temperature Gauges	✓	
Automatic Two Speed Travel	✓		– Maintenance and Machine Monitoring	✓	
Fuel Water Separator	✓		– Performance and Machine Adjustments	✓	
Power on Demand (not available in all regions)	✓		– Numeric Security Code	✓	
Variable Displacement Piston Pump	✓		– Multiple Languages	✓	
Load Sensing/Flow Sharing Hydraulics	✓		– Hour Meter with Wake Up Switch	✓	
HYDRAULICS			– Jog Dial (Cab only)	✓	
Smart Tech Electronic Pump	✓		Next Generation Advanced Monitor		✓
Accumulator	✓		– Touch Screen		✓
Automatic Swing Brake	✓		– Site Reference System		✓
Auxiliary Hydraulic Lines	✓		– High Definition Camera Capable (IP68 and IP69K)		✓
One and Two Way Auxiliary Flow	✓		– Numeric Security Code		✓
Continuous Auxiliary Flow	✓		UNDERCARRIAGE		
Auxiliary Line Quick Disconnects	✓		Expandable Undercarriage	✓	
OPERATOR ENVIRONMENT			Rubber Belt (300 mm/11.8 in wide)	✓	
Tilt-up Canopy or Tilt-Up Cab	✓		Steel Track (300 mm/11.8 in wide)		✓
Cab with Air Conditioning		✓	Dozer Blade	✓	
Cab with Heater		✓	Dozer Blade Float	✓	
Top Guard ISO 10262:1998 Level I	✓		Tie Downs on Track Frame	✓	
ROPS – ISO 12117-2:2008	✓		BOOM, STICK AND LINKAGES		
TOPS – ISO 12117:1997	✓		One Piece Boom (2085 mm/82.1 in)	✓	
Stick Steer Mode	✓		Standard Stick (1060 mm/41.7 in)	✓	
Travel Cruise Control	✓		Long Stick (1260 mm/49.6 in)		✓
Control Pattern Changer (optional in some regions)	✓		Front Shovel Capable	✓	
Adjustable Wrist Rests	✓		Pin-On	✓	
Washable Floor Mat	✓		Dual Lock Manual Coupler		✓
Travel Pedals and Hand Levers	✓		Thumb Ready (not available in all regions)	✓	
No Travel Pedals and Hand Levers (optional in some regions)		✓	Certified Lifting Eye (optional in some regions)	✓	
Machine Security	✓		Attachments including Couplers, Thumbs, Buckets, Augers and Hammers		✓
Standard Key with Pass Code	✓		2nd Auxiliary Hydraulic Lines	✓	
Push to Start with Key Fob/Pass Code		✓	Bucket Divert Lines	✓	
Fabric Suspension Seat (Cab only)	✓		Boom Lowering Check Valve	✓	
Vinyl Suspension Seat (Canopy only)	✓		Stick Lowering Check Valve	✓	
Vinyl Non-Suspension Seat (Canopy only) (not available in all regions)		✓	Hydraulic Quick Coupler Lines (not available in all regions)		✓
Hydraulic Lockout – All Controls	✓		ELECTRICAL		
Retractable High Visibility Seat Belt (75 mm/3 in)	✓		12 Volt Battery	✓	
Coat Hook	✓		Software (machine and monitor)	✓	
Cup Holder	✓		Maintenance Free Battery	✓	
Storage Pocket	✓		Battery Disconnect	✓	
Skylight	✓		Signaling/Warning Horn	✓	
Mounting Bosses for Front	✓		12 Volt Power Socket	✓	
Signaling/Warning Horn	✓		Product Link PL243 (regulations apply)		✓
Interior Light (Cab only)	✓		Product Link PLE643 (regulations apply)		✓
Boom Light, Halogen (not available in all regions)	✓		Travel Alarm (standard in some regions)		✓
LED Front Lights		✓	GUARDING		
LED Front and Rear Lights		✓	Polycarbonate Half Height Front Guard (Canopy only)		✓
LED Boom Light		✓	Polycarbonate Front Guard (ISO 10262 1998 Level I and EN356 P5A)		✓
Utility Space for Mobile Phone	✓		OTHER		
Mirrors Left and Right		✓	Bio Oil Capable		✓
			Eco Drain		✓
			Water Jacket Heater		✓
			Light Counterweight (100 kg/221 lb)		✓
			Extra Counterweight (250 kg/551 lb)		✓

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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