



# Cat<sup>®</sup> 301.5

## MINI EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 301.5 Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

#### ALL DAY COMFORT

- Adjustable wrist rests 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.

#### 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 with a push of a button. 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. Dig-to-blade and dozer float features allow 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 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
<b>Rated Net Power @ 2,400 rpm</b> ISO 9249/EEC 80/1269	14.3 kW
<b>Gross Power</b> ISO 14396	16.1 kW
Bore	77.0 mm
Stroke	81.0 mm
Displacement	1.1 L

### Weights

Minimum Operating Weight with Canopy*	1575 kg
Maximum Operating Weight with Canopy**	1768 kg

\*Minimum Weight is based on rubber tracks, canopy, operator and full fuel tank.

\*\*Maximum Weight is based on steel tracks, canopy, operator and full fuel tank.

### Weight Increase from Minimum Configuration

Long Stick	7 kg
Steel Tracks	60 kg
Expandable Undercarriage	129 kg



# 301.5 Mini Excavator

## Travel System

Travel Speed – High	4.4 km/h
Travel Speed – Low	2.9 km/h
Maximum Traction Force – High Speed	10.3 kN
Maximum Traction Force – Low Speed	16.0 kN
Ground Pressure – Minimum Weight	27.3 kPa
Ground Pressure – Maximum Weight	30.6 kPa
Gradeability (maximum)	30 degrees

## Service Refill Capacities

Cooling System	3.9 L
Engine Oil	4.4 L
Fuel Tank	22.0 L
Hydraulic Tank	18.0 L
Hydraulic System	26.0 L

## Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump	
Pump Flow @ 2,400 rpm	66 L/min
Operating Pressure – Equipment	213 bar
Operating Pressure – Travel	213 bar
Operating Pressure – Swing	103 bar
Auxiliary Circuit – Primary	
Flow	33 L/min
Pressure	213 bar
Auxiliary Circuit – Secondary	
Flow	14 L/min
Pressure	213 bar
Digging Force – Stick (standard)	8.2 kN
Digging Force – Stick (long)	7.2 kN
Digging Force – Bucket	14.1 kN

## Swing System

Machine Swing Speed	9.8 rpm
---------------------	---------

## Blade

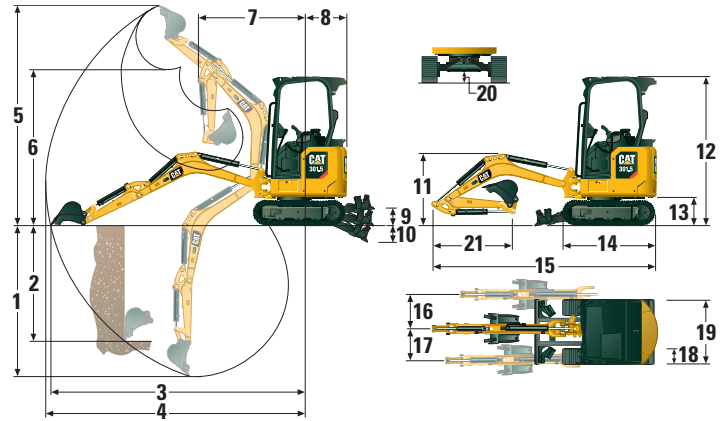
Width	990 mm
Height	225 mm

## Certification – 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

Average Exterior Sound Pressure (ISO 6395:2008)	93 dB(A)
--	----------



## Dimensions

	Standard Stick	Long Stick
1 Dig Depth	2340 mm	2540 mm
2 Vertical Wall	1800 mm	1890 mm
3 Maximum Reach at Ground Level	3730 mm	3890 mm
4 Maximum Reach	3800 mm	3960 mm
5 Maximum Dig Height	3430 mm	3490 mm
6 Maximum Dump Clearance	2450 mm	2510 mm
7 Boom in Reach	1460 mm	1450 mm
8 Tail Swing	820 mm	820 mm
9 Maximum Blade Height	275 mm	275 mm
10 Maximum Blade Depth	260 mm	260 mm
11 Boom Height in Shipping Position	1090 mm	1040 mm
12 Overall Shipping Height	2310 mm	2310 mm
13 Swing Bearing Height	445 mm	445 mm
14 Overall Undercarriage Length	1460 mm	1460 mm
15 Overall Shipping Length	3470 mm	3450 mm
16 Boom Swing Right	50 degrees	50 degrees
17 Boom Swing Left	65 degrees	65 degrees
18 Track Belt/Shoe Width	230 mm	230 mm
19 Track Width		
Retracted	990 mm	990 mm
20 Minimum Ground Clearance Below Undercarriage	155 mm	155 mm
21 Stick Length	960 mm	1160 mm

## Lift Capacities – Minimum Configuration\*

Lift Point Height			1.5 m			2 m			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
2 m	Standard Stick	kg							290	242	182	2.9
	Long Stick	kg							230	218	164	3.1
1.5 m	Standard Stick	kg				384	384	324	283	212	159	3.2
	Long Stick	kg							227	194	144	3.3
1 m	Standard Stick	kg				584	412	303	289	198	147	3.3
	Long Stick	kg	743	650	462	495	415	306	234	181	134	3.4
0 m	Standard Stick	kg	625	585	405	704	379	273	343	197	146	3.2
	Long Stick	kg	713	576	396	703	375	269	277	179	131	3.4

\*Minimum Weight includes rubber tracks, canopy, operator, full fuel tank, fixed undercarriage, and no bucket.

## Lift Capacities – Maximum Configuration\*\*

Lift Point Height			1.5 m			2 m			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
2 m	Standard Stick	kg							290	252	190	2.9
	Long Stick	kg							230	227	171	3.1
1.5 m	Standard Stick	kg				384	384	335	283	221	166	3.2
	Long Stick	kg							227	202	150	3.3
1 m	Standard Stick	kg				584	427	315	289	206	154	3.3
	Long Stick	kg	743	674	478	495	431	317	234	189	140	3.4
0 m	Standard Stick	kg	625	608	422	704	395	285	343	206	152	3.2
	Long Stick	kg	713	599	413	703	390	280	277	187	137	3.4

\*\*Maximum Weight includes steel tracks, canopy, operator, full fuel tank, fixed undercarriage, and no bucket.

# 301.5 Mini Excavator

## EQUIPMENT

### ENGINE

- Cat C1.1 Engine (China Nonroad Stage III)
- Automatic Engine Idle
- Automatic Engine Shutdown
- Automatic Two Speed Travel
- Fuel Water Separator
- Power on Demand
- Variable Displacement Piston Pump
- Load Sensing/Flow Sharing Hydraulics

### HYDRAULICS

- Smart Tech Electronic Pump
- Accumulator
- Automatic Swing Brake
- Auxiliary Hydraulic Lines
- One and Two Way Auxiliary Flow
- Continuous Auxiliary Flow

### OPERATOR ENVIRONMENT

- Canopy Only
- ROPS – ISO 12117-2:2008
- TOPS – ISO 12117:1997
- Top Guard – ISO 10262:1998 (Level I)
- Next Generation Standard LCD Monitor
- Machine Security – Standard Key with Pass Code or Push to Start with Fob
- Adjustable Wrist Rests
- Vinyl Seat (with or without suspension)
- Retractable High Visibility Seat Belt (75 mm)
- Coat Hook
- Cup Holder
- Storage Pocket
- Skylight
- Washable Floor Mat
- Next Generation Stick Steer
- Hydraulic Lockout – All Controls
- Machine 2-Point Lifting
- Tilt-up Canopy

### UNDERCARRIAGE

- Fixed Undercarriage
- Rubber Belt or Steel Track (230 mm wide)
- Dozer Blade with Float
- Tie Downs on Track Frame

### BOOM, STICK AND LINKAGES

- One Piece Boom (1780 mm)
- Standard Stick (960 mm) or Long Stick (1160 mm)
- Front Shovel Capable

### ELECTRICAL

- 12 Volt Battery
- Software (machine and monitor)
- Maintenance Free Battery
- Warning Horn
- 12 Volt Power Socket
- Boom Light, Halogen
- Pattern Changer
- Battery Disconnect
- Product Link™

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

- Mirrors Left and Right

### ELECTRICAL

- LED Front Lights
- LED Front and Rear Lights
- LED Boom Light

### OTHER

- Buckets
- Travel Alarm
- Water Jacket Heater
- Eco Drain

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)

© 2019 Caterpillar  
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ8140-02 (06-2019)  
Replaces AEHQ8140-01  
(China)

