Cat®
255

Compact Track Loader

Features:

The Cat® 255 Compact Track Loader, with its vertical lift design, delivers extended reach and lift height for quick and easy truck loading. Its standard torsion suspension undercarriage system provides superior traction, flotation, stability, and speed to work in a wide range of applications and underfoot conditions. The 255 features the following:

- **Redesigned Operator Station** delivers a larger operating environment, and combined with additional seat travel, the 255 provides more space for operators of any size. The optional **one-piece, sealed, and pressurized cab** offers a clean and quiet workspace with excellent air distribution through optimally placed vents throughout the cab.
- **Available ventilated and heated high-back air ride seat** with seat-mounted adjustable joystick controls deliver industry-leading operator comfort.
- **High-performance power train** provides selectable settings for drive power priority and maximum travel speed (overdrive) to customize the machine performance to match the task.
- **Three levels of auxiliary hydraulic performance available** Standard Flow, High Flow, and High Flow XPS. **Standard flow** for attachments that require a base level of auxiliary flow and horsepower, **High Flow** boosts the auxiliary flow for applications that demand additional hydraulic flow for increased attachment performance, and the **High Flow XPS** hydraulic system provides maximum auxiliary hydraulic performance by delivering additional flow and additional pressure for the most demanding attachments and applications.
- **Electronically controlled Cat C2.8T engine** meets U.S. EPA Tier 4 Final and EU Stage V emission standards while delivering maximum horsepower across a wide RPM range and providing high torque for increased working performance, no matter the application.
- **Standard torsion suspension undercarriage and standard two-speed travel,** combined with the optional Speed Sensitive Ride Control system improves operation on rough terrain, enabling better load retention, increased productivity, and greater operator comfort.
- **Maximize machine capability and control with the Advanced Joysticks and Advanced Touchscreen Monitor.** The **20.3 cm (8-inch) Advanced Touchscreen Monitor** offers cutting-edge functionality and control that includes an integrated radio, Bluetooth® connectivity, and multi-camera (side-view) option, and supports 32 different language choices. The **Advanced Joysticks** provide unmatched control of machine functions and adjustments within the display without operators having to remove their hands from the controls. This includes on-joystick navigation of the Advanced Touchscreen Monitor, radio volume up/down/mute, creep activation, creep on/off, creep speed increment/decrement, one-button Smart Attachment control activation, and additional auxiliary control buttons that deliver single-button control of complex attachment functions.
- **Ground-level access** to all daily service and routine maintenance points help reduce machine downtime for greater productivity.
- **Broad range of performance-matched Cat Attachments** make the Cat Compact Track Loaders the most versatile machine on the job site.

Specifications

Engine

Engine Model	Cat® C2.8T (turbo)	
Gross Power SAE J1995	55.4 kW	74.3 hp
Net Power SAE 1349	54.8 kW	73.5 hp
Net Power ISO 9249	54.4 kW	73 hp
Peak Torque at 1,600 rpm SAE J1995	300 N·m	221 lbf-ft
Displacement	2.8 L	171 in^3
Stroke	90 mm	3.5 in
Bore	110 mm	4.3 in

Weights*

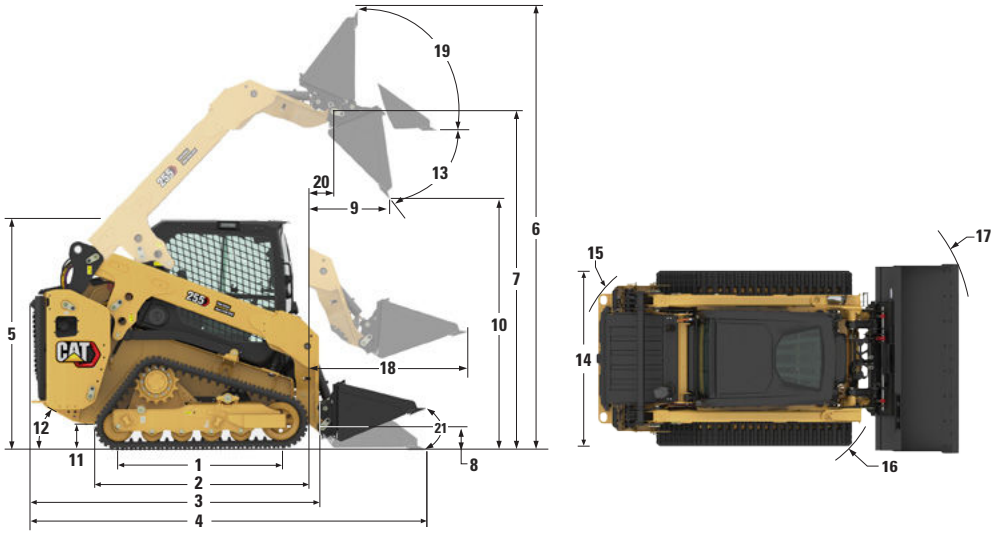
Operating Weight	4345 kg	9,578 lb
Tip Load	3238 kg	7,140 lb
Rated Operating Capacity (ROC) (35%)	1133 kg	2,499 lb
ROC (50%)	1619 kg	3,570 lb
Enclosed Cab Adds to Operating Weight	+82 kg	+180 lb
Tip Load	+49 kg	+108 lb
ROC (35%)	+17 kg	+38 lb

Weights* *(continued)*

Counterweight Adds to Operating Weight	+125 kg	+276 lb
Tip Load	+172 kg	+379 lb
ROC (35%)	+60 kg	+132 lb
Wide Track (400 mm/15.7 in) Adds to Operating Weight	+54 kg	+119 lb
Tip Load	+36 kg	+79 lb
ROC (35%)	+13 kg	+28 lb

*Operating Weight, Operating Specifications, and Dimensions are all based on 1730 mm (68") Low Profile Bucket with bolt-on cutting edge, 320 mm (12.6") narrow track, 75 kg (165 lb) operator, open canopy, mechanical suspension seat, HD battery with disconnect, standard flow hydraulics, manual coupler, and full fluids. No external counterweights, and no dual self-level/return-to-dig/work tool positioner.

255 Compact Track Loader



Dimensions*

1	Length of Track on Ground	1485 mm	58.5 in
2	Overall Length of Track	1948 mm	76.7 in
3	Length without Bucket	2800 mm	110.2 in
4	Length with Bucket on Ground	3430 mm	135 in
5	Height to Top of Cab	2115 mm	83.3 in
6	Maximum Overall Height	3941 mm	155.2 in
7	Bucket Pin Height at Maximum Lift	3150 mm	124.0 in
8	Bucket Pin Height at Carry Position	195 mm	7.7 in
9	Reach at Maximum Lift and Dump	540 mm	21.3 in
10	Clearance at Maximum Lift and Dump	2424 mm	95.4 in
11	Ground Clearance	212 mm	8.3 in
12	Departure Angle	30.6°	
13	Maximum Dump Angle	46.3°	
14	Vehicle Width (320 mm/12.6 in tracks)	1675 mm	65.9 in
	Vehicle Width (400 mm/15.7 in tracks)	1760 mm	69.3 in
15	Turning Radius from Center – Machine Rear	1656 mm	65.2 in
16	Turning Radius from Center – Coupler	1377 mm	54.2 in
17	Turning Radius from Center – Bucket (racked)	2105 mm	82.9 in
18	Maximum Reach with Arms Parallel to Ground	1162 mm	45.7 in
19	Rack Back Angle at Maximum Height	85.2°	
20	Bucket Pin Reach at Maximum Lift	151 mm	5.9 in
21	Bucket rollback angle (ground level)	27°	

Power Train

Travel Speed (Forward or Reverse)		
One Speed	9.2 km/h	5.7 mph
Two Speed	14.7 km/h	9.1 mph

Hydraulic System

Hydraulic Flow – Standard:		
Loader Hydraulic Pressure	24 130 kPa	3,500 psi
Loader Hydraulic Flow	86 L/min	23 gal/min
Hydraulic Power (calculated)	34.6 kw	46.4 hp
Hydraulic Flow – High Flow:		
Loader Hydraulic Pressure	24 130 kPa	3,500 psi
Loader Hydraulic Flow	113 L/min	30 gal/min
Hydraulic Power (calculated)	45.4 kW	60.9 hp
Hydraulic Flow – High Flow XPS:		
Loader Hydraulic Pressure	28 000 kPa	4,061 psi
Loader Hydraulic Flow	113 L/min	30 gal/min
Hydraulic Power (calculated)	52.7 kW	70.7 hp

Operating Specifications*

Rated Operating Capacity:		
35% Tipping Load	1133 kg	2,499 lb
50% Tipping Load	1619 kg	3,570 lb
Rated Operating Capacity with Optional Counterweight (at 35%)	1194 kg	2,631 lb
Tipping Load	3238 kg	7,140 lb
Breakout Force, Tilt Cylinder	3060 kg	6,746 lb
Breakout Force, Lift Cylinder	2674 kg	5,895 lb
Ground Contact Area (320 mm/12.6 in track)	1.02 m^2	1,582 in^2
Ground Contact Area (400 mm/15.7 in track)	1.28 m^2	1,977 in^2
Ground Pressure (320 mm/12.6 in track)	41.8 kPa	6.1 psi
Ground Pressure (400 mm/15.7 in track)	34.0 kPa	4.9 psi

Cab

Rollover Protective Structure (ROPS)	ISO 3471:2008
Falling Object Protective Structure (FOPS)	ISO 3449:2005 Level I

Service Refill Capacities

Cooling System	11.5 L	3.0 gal
Engine Crankcase	8.2 L	2.2 gal
Fuel Tank	95 L	25.1 gal
Hydraulic System	36.8 L	9.7 gal
Hydraulic Tank	26 L	6.9 gal

255 Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- The Cat® C2.8T (turbo) engine meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

  Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg of refrigerant which has a CO_2 equivalent of 1.216 metric tonnes.

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
  - Barium < 0.01%
  - Cadmium < 0.01%
  - Chromium < 0.01%
  - Lead < 0.01%

Sound Performance

Inside Cab* – 80 dB(A)

Outside Cab** – 103 dB(A)

- Cab and ROPS are standard in North America and Europe.

*The declared dynamic operator sound pressure levels per ISO 6395:2008. The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

**The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Extended life coolant and long life hydraulic fluid extend maintenance intervals to reduce fluid consumption
  - Boost productivity with Cat technologies like work tool positioner, return to dig and Cat Smart Attachments
  - Save fuel with efficiency features such as foot throttle pedal and cooling system demand fan
  - Remote machine monitoring through onboard Product Link telematics

Recycling

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	64.94
Rubber	8.85
Iron	7.66
Other	4.57
Nonferrous Metal	3.90
Fluid	3.43
Plastic	2.31
Mixed Metal	2.00
Mixed-Metal and Nonmetal	1.18
Uncategorized	1.16
Mixed Nonmetallic	0.01
Total	100.00

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714:2008 (Earth-moving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

  All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714:2008 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

  Because of variations of product configurations, the following values in the table may vary.

Recyclability – 95%

The data provided above was based on the product configuration as provided by the individual product group.

ATTACHMENTS

Get more from your machine with Cat attachments. Choose from a wide variety of options and tailor your machine to different tasks and conditions.

Augers
Backhoes
Bale Grabs
Bale Spears
Blades, Grader, Box, Angle and Dozer
Brooms, Angle, Pickup and Utility
Brushcutters
Buckets
Cold Planers
Compactors
Fork Tines and Carriages
Hammers
Material Handling Arm
Mulchers
Nursery Forks
Rakes, Grapple, Landscape and Power Box
Shears
Snow Blowers
Snow Plows
Snow Pushes
Snow Wings
Stump Grinders
Tillers
Trenchers
Wheel Saws
Smart Backhoe
Smart Dozer Blade with Assist
Smart Grader Blade with Assist

MANDATORY EQUIPMENT

- Quick Coupler: Manual or Hydraulic
- High Visibility Seat Belt: 50 mm (2 in), 75 mm (3 in), or 3-point lap/shoulder
- Steel Imbed Rubber Track – 320 mm (12.6 in) bar tread, 400 mm (15.7 in) block tread, 400 mm (15.7 in) bar tread
- Dual Flange Front Idler/Single Flange Rear Idler or Triple Flange Front/Rear Idlers

PERFORMANCE PACKAGES

- Performance Package HP1: *Standard Flow Hydraulics*
- Performance Package HP3: *High Flow XPS Hydraulics*

COMFORT PACKAGES

- Open canopy: *Cup Holder, Cell Phone Pocket, choice of vinyl Seat (Mechanical Suspension, High Back/Heated/Air Ride Seat)*
- Enclosed Cab with heat and air conditioning: *Side Windows, Cup Holder, Cell Phone Pocket, choice of Seat (Mechanical Suspension, High Back/Heated Air Ride Seat, High Back/Ventilated and Heated Air Ride Seat) and Door choice (Glass or Polycarbonate)*

TECHNOLOGY PACKAGES

- T2 – *Standard Display, Standard Joysticks, traditional Key Start switch, and Rear-view camera.*
- T4 – *Advanced Touchscreen Monitor, Advanced Joysticks, Push start, X-mount cell phone holder, and a Rear-view camera.*
- T5 – *T4 + 2 additional side view cameras.*

RADIO

- Radio, *none – for open canopy machines and countries not certified for Bluetooth® technology*
- Integrated AM/FM radio with Bluetooth technology. *Includes USB port, 3.5 mm (0.13 in) AUX input, and BT microphone. Only for use with enclosed cab. Availability varies by country.*
- Integrated DAB+/AM/FM radio with Bluetooth technology. *Includes USB port, 3.5 mm (0.13 in) AUX input, and BT microphone. Only for use with enclosed cab. Availability varies by country.*

PRODUCT LINK™

- Product Link™ Basic series PL243
- Product Link Elite series PLE643

COOLING FAN

- On-demand, variable speed hydraulic cooling fan
- On-demand, variable speed hydraulic cooling fan, with automatic and manual purge reversing operation

GUARDING AND SEALING PACKAGES

- HD0 – *base guarding and sealing (engine air inlet rain cap, front cab-to-frame sealing, and hydraulic fill access door)*
- HD1– *intermediate guarding and sealing† (HD0 + cab-to-frame side sealing, lockable fuel fill access door, tilt cylinder guarding, and drive line bottom guarding.)*
- HD2 – *most comprehensive guarding and sealing† (HD1 + turbo guard, exhaust stack wrap, DPF wrap, quick disconnect guarding, fully enclosed drive line guarding, under step hydraulic lines guard cover, engine air inlet pre-cleaner.)*

†Some equipment varies by region.

STANDARD EQUIPMENT

ELECTRICAL

- Work Tool Electrical Harness
- Heavy duty battery
- Battery disconnect with lockout feature
- 12-volt Electrical System
- 85 Ampere Alternator
- LED Work Lights
- Auto Reverse Lights
- Switch Backlighting
- Interior LED Dome Light
- Backup Alarm
- Electrical Outlet, Beacon
- Exterior Courtesy Lighting

OPERATOR ENVIRONMENT

- Full color LCD monitor: *Creep speed control, Drive response adjustment, Implement response adjustment, Drive Power Priority adjustment, Language selection (× 32), Multi-operator Anti-theft Security System and Monitoring, Maintenance schedule and reminders, Event and Diagnostic Code monitoring, Date /Time/ Units/Brightness settings, and Smart Technology for use with Smart Attachments.*
- Operator Warning System Indicators: *Air Filter Restriction, Alternator Output, Armrest Raised/Operator Out of Seat, Engine Coolant Temperature, Engine Oil Pressure, Glow Plug Activation, Hydraulic Supply Filter Restriction, Hydraulic Oil Temperature, Park Brake Engaged, Engine Emission System (where applicable)*
- Gauges: *Fuel Level, Hour Meter, Hydraulic Temperature, Hour Meter, Battery Voltage, Tachometer*
- Fold In Ergonomic Contoured Armrest
- Control Interlock System, when operator leaves seat or armrest raised: *Hydraulic System Disables, Hydrostatic Transmission Disables, Parking Brake Engages*
- ROPS Cab, Tilt Up
- FOPS, Level I
- Top and Rear Windows
- Floor Mat
- Headliner
- Interior Rearview Mirror
- Horn
- Hand (Dial) Throttle, Electronic
- Seat Mounted Joystick Controls
- Cell Phone Storage Pocket
- Cup Holder
- 12-volt power port
- Foot Throttle
- Rear-view Camera

HYDRAULICS

- Selectable control pattern – ISO or H
- Electro/hydraulic implement control
- Electro/hydraulic hydrostatic transmission control
- Speed sensor guarding
- Heavy duty flat faced quick disconnects with integrated pressure release lever
- Hydraulic oil level sight gauge

POWER TRAIN

- Cat C2.8T turbocharged diesel engine, meeting Tier 4 Final and Stage V Emission Standards:
  - Glow plugs starting aid
  - Liquid cooled, direct injection
- Extended life antifreeze (–37° C, –34° F)
- Air cleaner, dual element, radial seal
- Scheduled Oil Sampling (S·O·S℠) Valve, Hydraulic Oil
- Ecology drain – coolant
- Radiator coolant level sight gauge
- Radiator expansion bottle
- Filter, hydraulic supply, cartridge type
- Filter, hydraulic return, cartridge type
- Filter, canister type, engine oil
- Filter, canister type, fuel and water separator
- Radiator/hydraulic oil
- Cooler (side-by-side)
- Spring applied, hydraulically released, parking brakes
- Hydrostatic transmission
- Lockable fuel cap
- Hydraulic demand cooling fan
- Auto engine idle

UNDERCARRIAGE

- Torsion Suspension (4 independent torsion axles)
- Two speed travel
- Integrated tie downs on track frame (4)

FRAME

- Machine tie down points (9)
- Removable panels for machine frame cleanout
- Support, lift arm
- Steel rear and front bumpers, welded
- Fuel fill, machine right hand side

OTHER

- Auxiliary Hydraulics, Continuous Flow
- Telematics, Product Link, Cellular
- Steel engine door with replaceable louvers
- Engine door – lockable
- Work tool attachment coupler
- Cat ToughGuard™ hose

OPTIONAL EQUIPMENT

- External Counterweights
- Beacon, LED
- Engine Block Heater – 120V
- Oil, Hydraulic, Cold Operation
- 4-point machine lifting eyes
- Paint, Custom
- Speed Sensitive Ride Control
- Bluetooth Key Security
- Attachment Hose Guide
- Corrosion Inhibitor Coating

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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