



SANY HEAVY MACHINERY LTD
<http://www.sanyglobal.com>

This manual was printed in 2024. The product information may have been changed when you read it. Products (including specific configuration, detail, etc.) are based on the specific models and products applicable to markets outside China, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.



SY215C NLC

Engine power

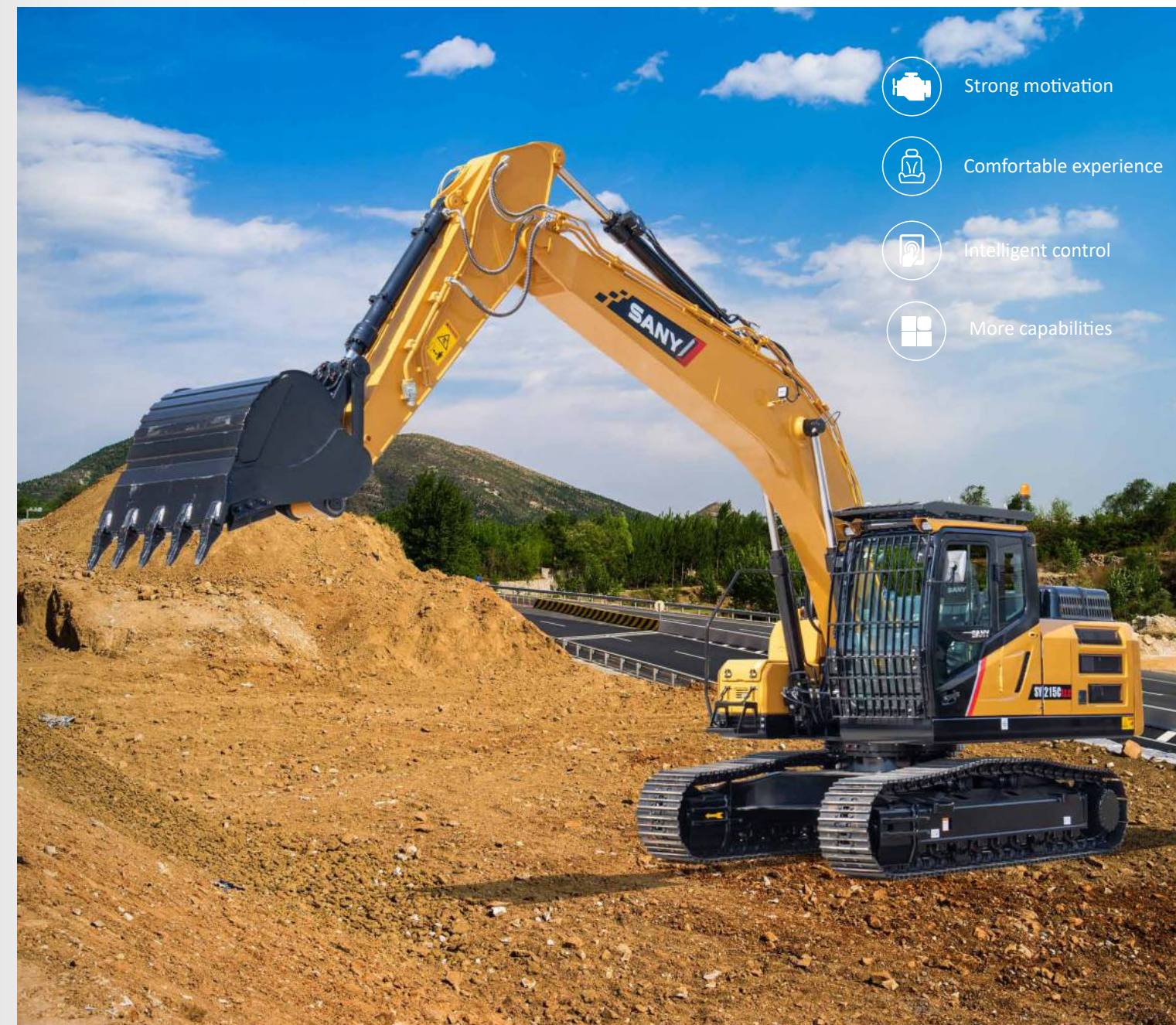
129KW/2200rpm

Bucket capacity

1.2m³

Operating weight

23500kg



Strong motivation



Comfortable experience



Intelligent control



More capabilities

IT IS AS LOW IN CONSUMPTION AS IT IS POWERFUL IN PERFORMANCE

The highly efficient engine with common rail technology guarantees excellent performance. Four different operating modes for the various operating conditions precisely adjust the engine and hydraulic power to the requirements. This improves the excavator's response behaviour and ensures lower fuel consumption and reduced emissions.



Strong motivation

SANY's automation control tech balances pump and engine as active loads with dynamic and static optimization.

Comfortable experience

With a multi-function display and one-button start, along with function buttons, the operation becomes more user-friendly.

Intelligent control

Different working tools can be set up, with the versatile handle making work effortless.

More capabilities

Power and efficiency - hydraulic control system adapts the pump power to the available engine power. This means greater efficiency and lower fuel consumption, thereby providing excellent cost-effectiveness.

Strong motivation

The automation control technology developed by SANY integrates dynamic optimization and static optimization to perfectly balance the pump and engine as active loads.

By utilizing top-of-the-line engines and hydraulic systems, there is an 8% decrease in fuel consumption and a 4% improvement in efficiency.

01 Engine

The highly efficient engine with common rail technology guarantees excellent performance. Four different operating modes for the various operating conditions precisely adjust the engine and hydraulic power to the requirements. This improves the excavator's response behaviour and ensures lower fuel consumption and reduced emissions.



Engine model: QSB6.7
Engine power: 129KW/2200rpm
Displacement: 6.7 L

02 Main valve

The designation is according to the needs of customers, which has "high reliability, small pressure loss, high flow distribution efficiency, smooth compound action" and other outstanding advantages, to help customers easily solve heavy work.



Main valve model: KMX15RB
Rated flow: 300 L/min
Rated pressure: 37.7 MPa

03 Main pump

The position controlled hydraulic system adjusts the required pressure and oil quantity according to requirements. The powerful, variable piston pumps reach a flow rate of 2 x 222 l/min and therefore achieve a very high level of efficiency at a low engine speed.



Main pump model: K7V125D
Displacement: 2X130 CC
Maximum flow: 2X273 L/min
Rated pressure: 34.3 MPa



Comfortable experience

The cab has undergone upgrades to ensure compliance with ROPS& FOPS standards, along with significant improvements in safety, sealing, and comfort.

01 Large display

The 10.4-inch capacitive touch screen and high-speed dual-core processor combine to deliver a fluid experience.

02 Easy operation

Start with just one button, control multiple functions with a single panel for improved convenience.

01 Enable display in multiple languages

There are 16 national languages available for selecting the display language, accommodating different regions.

03 Enlarged seat

The seating area has been expanded to accommodate the human body's curves.

01 Multi-function display

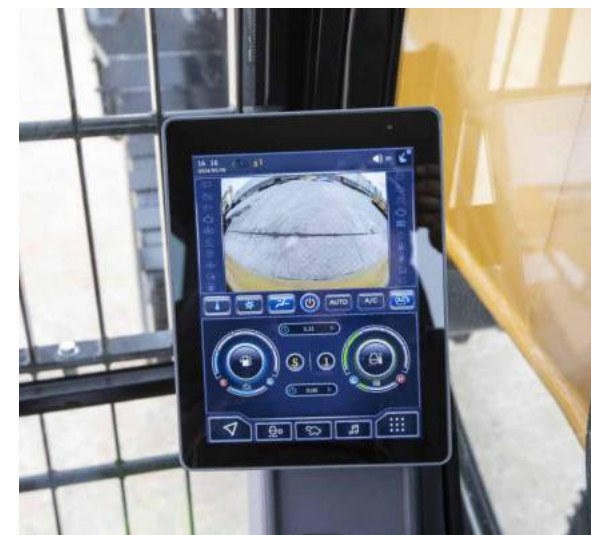
Display includes Bluetooth, WIFI, phone, radio, and AC controls. Also shows front and rear camera images.

03 Heated seat

Stay warm and cozy during the cold winter months with the seat's 24V heating feature for a comfortable working environment.

04 Automatic regulation of air conditioning

Just set the temperature on the air conditioner and its automatic mode will ensure a comfortable temperature in the cab without any further adjustments needed.



Intelligent control

Interface for displaying multiple information

The new display screen serves as an interface that allows users to check equipment information like fuel level and battery status whenever needed, providing real-time updates on equipment status.

Multi-function handle

With a multi-function handle that combines 6 functions like hydraulic shear rotation, opening and closing, setting idle speed with a single button, and whistle, the operation becomes more convenient.

One key for controlling idle speed

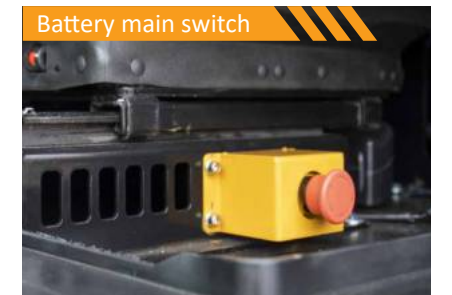
Select either automatic or manual idle in the display screen, and switch the idle mode on and off using the right handle for more fuel-efficient performance.

Prompt fault detection

Through a single click on the main interface of the display screen, users can retrieve fault codes, facilitating the acquisition of precise maintenance reference information and boosting maintenance efficiency.



Safety facility



More capabilities



Command

The operating handle reduced the operating blind area by 8.8% , and the operating force decreased by 35.7%.



Upkeep

Conveniently situated at the front of the excavator, the fuel filling pump and urea filling tank aid in facilitating scheduled maintenance.

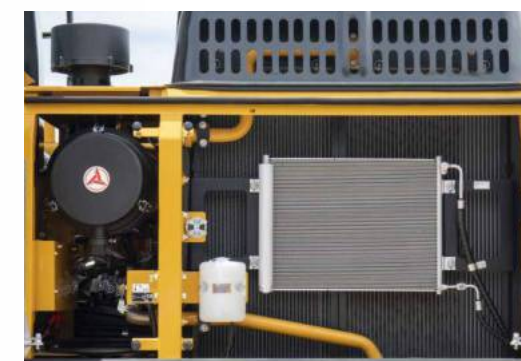


Safety

CE certified with safety enhancements like full protection net and warning lights. Cab passed FOPS&ROPS performance testing certification successfully.

Minimal sound

By employing the clutch fan, a 5dB noise reduction and 3% decrease in fuel consumption are attained.



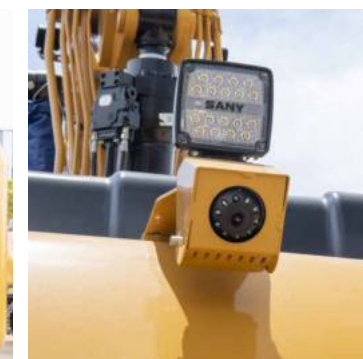
Stable

Core components are safeguarded by the side door's double-layer panel construction.



Safety

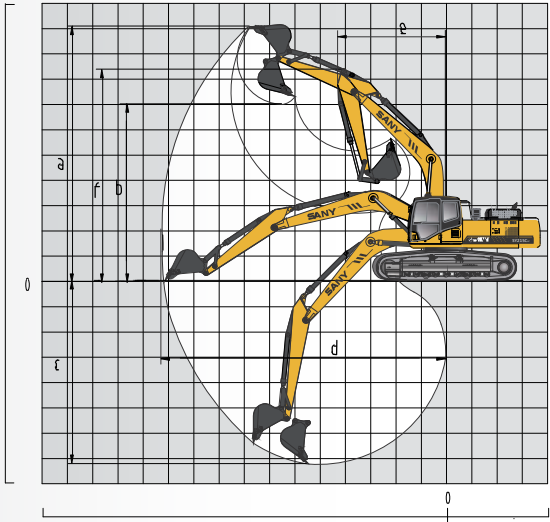
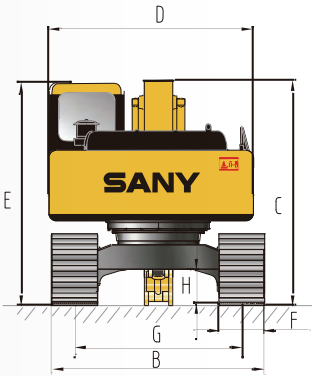
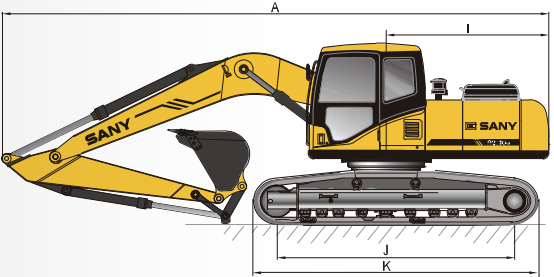
Tail and side cameras enable continuous monitoring of the work environment, enhancing operational safety, along with safety alarm lights and emergency shut-down switches.



Technical specifications

Specification		Main performance	
Rated weight	23500 kg	Swing speed	11.5 rpm
Model	CUMMINS QSB6.7	Travel speed (High/Low)	5.4/3.3 (km/h)
Type	Variable-capacity piston pump	Max. travel force	191 kN
Enginer power	129 kW / 2200 rpm	Gradeability	35°
Maximum torque	881 N·m / 1300 rpm	Bucket capacity	0.93 m³
Displacement	6700 ccm	Ground pressure	58 kPa
		Bucket digging force ISO	143 kN
		Arm Digging Force	115 kN
Hydraulic system		Relief valve settings	
Main pump	Triple Composite Pump	Implement circuit	343 bar
Max. oil flow	2 x 241 L/min	Heavy lift circuit	343 bar
Travel motor	2*axial piston motor with parking brake	Swing circuit	275 bar
Swing motor	1*axial piston motor with swing holding brake	Travle circuit	343 bar
		Pilot pressure	39 bar
Service refill capacities		Under and upper structure	
Fuel tank	300 L	Boom cylinder diameter*stroke	140*1480 mm
Engine coolant	27.6 L	Arm cylinder diameter *stroke	135*1490 mm
Engine oil	17.5 L	Track roller (per side)	9
Drive (per side)	4 L	Carrier roller (per side)	2
Final drive(each side)	5.5 L	Bucket cylinder diameter*stroke	115*1200 mm
Hydraulic oil tank	210 L		

Machine dimensions



Overall dimensions (mm)	SY215CNLC
A. Transport Length	9635
B. Transport Width	2540
C. Transport Height	3315
D. Upper Width	2540
E. Cab Height	3000
F. Track Shoe Width (standard)	500
G. Track Gauge	2040
H. Minimum Ground Clearance	468
I. Tail Swing Radius	2950
J. Length Center Idler to Center Sprocket	3640
k. Track Length	4445
Boom Length	5681
Arm Length (standard)	2925

Operation range (mm)	SY215CNLC
a. Maximum Digging Height	9470
b. Maximum Dumping Height	6735
c. Maximum Digging Depth	6450
d. Maximum Digging Reach	9745
e. Minimum Swing Radius	3662
f. Maximum Height at Minimum Swing Radiu	7600

